L30 1915

TRANSIT BOOK

N. W. P. R. R. CO.

14.113.0033

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The Hicks-Judd Company
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11.9
9.5
21½ = 1st Need – 8¢
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12-F New Copy
6d

Laguitas ✓	53-58	Trestle 26 J estab Grades	
" ✓	60	Location of cribbing	4/12/16

INDEX L-30

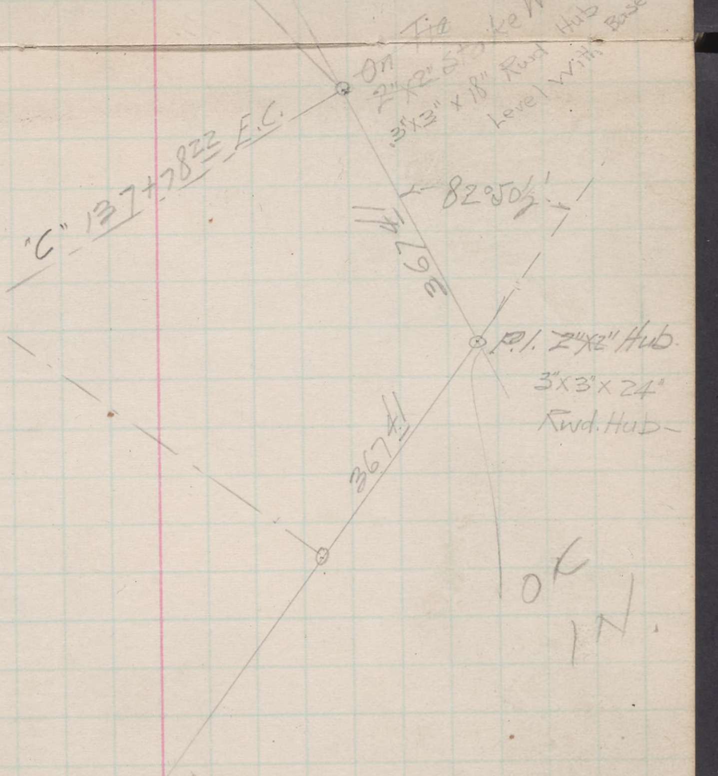
Location	pages	Description	date
Lagunitas	✓ 3 - 9 ✓	Line change Lagunitas to Shafters	
"	✓ 10 - 15 ✓	Shafters to Camp Berkeley.	
San Geronimo	✓ 16	Line change to avoid cookout	11/29/15
Lagunitas	✓ 17 - 22	Existing Line Shafters to Lagunitas	
"	✓ 23 - 25	Line change Lagunitas to Shafters From page 3	
"	✓ 25 - 29	" " Shafters - Camp Berkeley	
San Geronimo	✓ 31	Location of fence - set 30' from ℄.	12/11/15
Lagunitas	✓ 32 - 35	existing alignment Shafters to Camp Berkeley	12/20/15
Tayorville	✓ 37 - 38	Relignment 1st curve west	
Jewell	✓ 39 - 40	1st + 2nd curves west of	
Garcia	✓ 41 - 42	1st - curve East relignment	3/11/16
Lagunitas	✓ 43 - 48	Trestle 25 H established grades	
"	✓ 50 - 51	Water supply for tank	11/26/15
Pt. Reyes	✓ 52	Graveling in front of depot	11/30/15

℄ 137+78.22 E.C.

13°46' Curve Lt	
Δ = 82°50½'	Arc = 601.76
S.T. = 367.41	
R = 416.44	

Actual Ext. = 138.85

℄ 131+76.46 B.C. 13°46' Lt



11-10-15

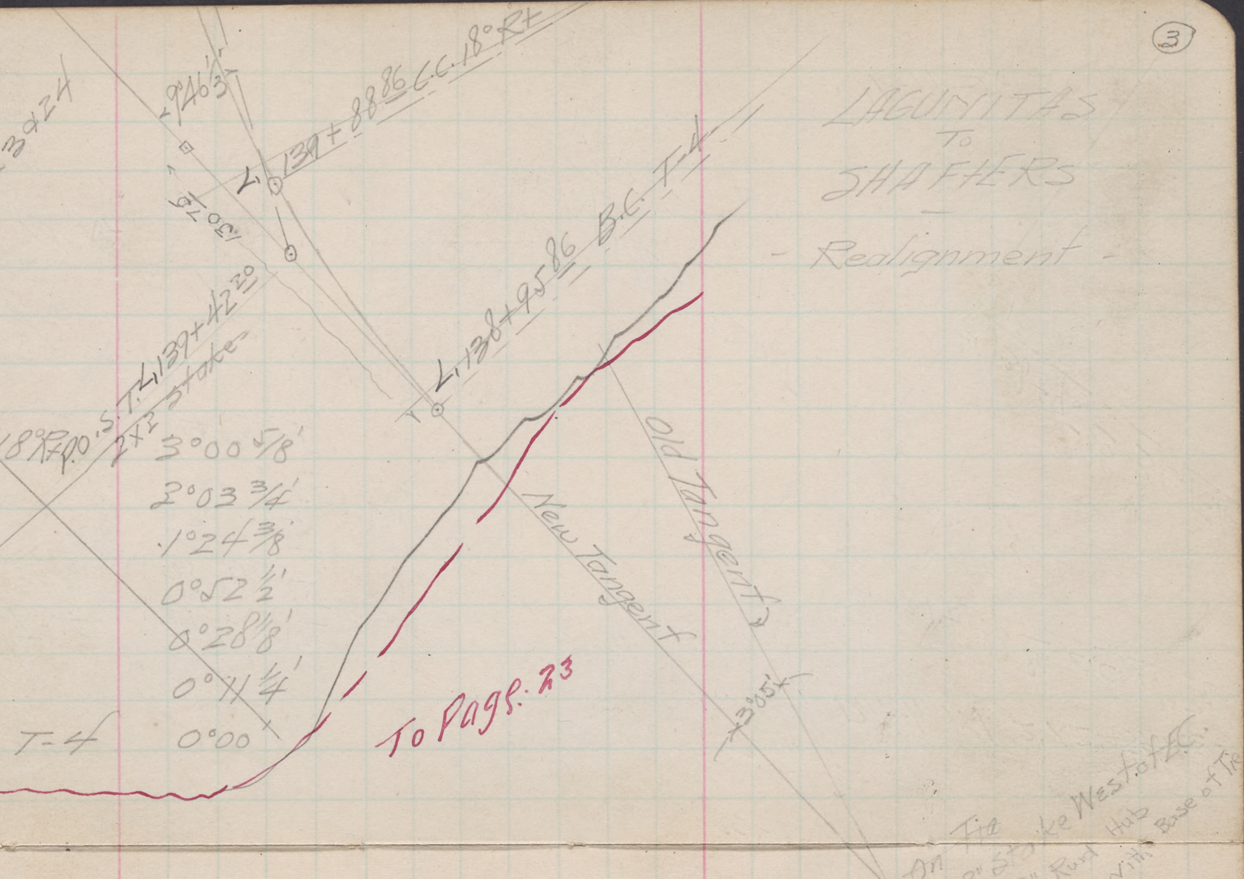
℄ 131+76.06 = } ℄ Stationing Assumed
Reval. 131+76.40 = } Erroneously - W. T.R.

"L1 Line"

LAGUNITAS To SHAFTERS — Realignment

Abandonned See Pages 23 & 24

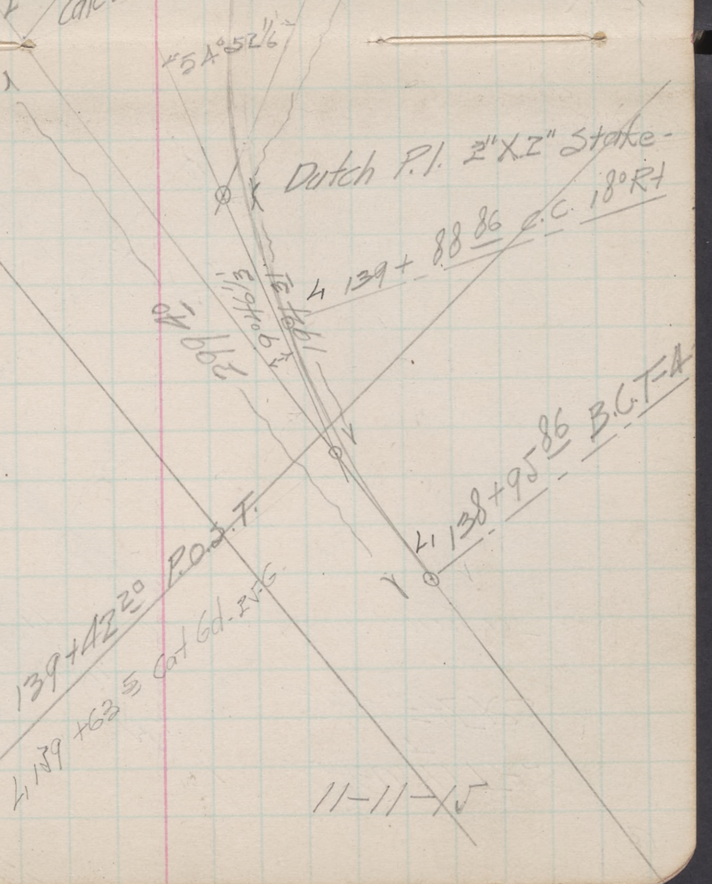
L1 139+88 86	C.C. 18° Rt	3°00 5/8'
+70 86		2°03 3/4'
+55 86		1°24 3/8'
+40 86		0°52 1/2'
+25 86		0°28 1/8'
9+10 86		0°11 1/4'
L1 138+95 86	B.C. T-4	0°00



To Page 23

L 143+21.73	C.C.T-4	29°57 50/15
43		28°00 15'
+46		23°08 55'
42+01		19°05 55'
+50		14°30 15'
41		10°00 15'
+50		5°30 15'
40		1°00 15'
L 139+88.86	C.C. 18° Rt	0°00'

18° Curve Rt
Δ = 59°55'
Arc = 332.87



LAGUNITAS - SHAFTERS
Realignment

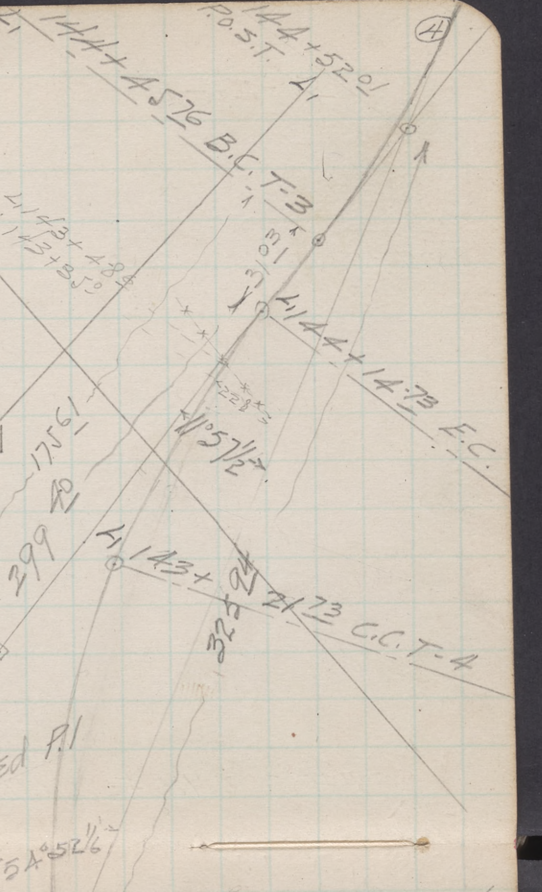
Fence to be changed between
E.S. L. 139+63± ?d L 143+35±
Total Fence = 360 Ft.

144+14.73	E.C.	0°00'
L +99.73		0°11 1/4'
+84.73		0°28 1/8'
+69.73		0°52 1/2'
+54.73		1°24 3/8'
+39.73		2°03 3/4'
L 143+21.73	C.C.T-4	3°00 5/8'

Abandonned
See Pages 23 + 24

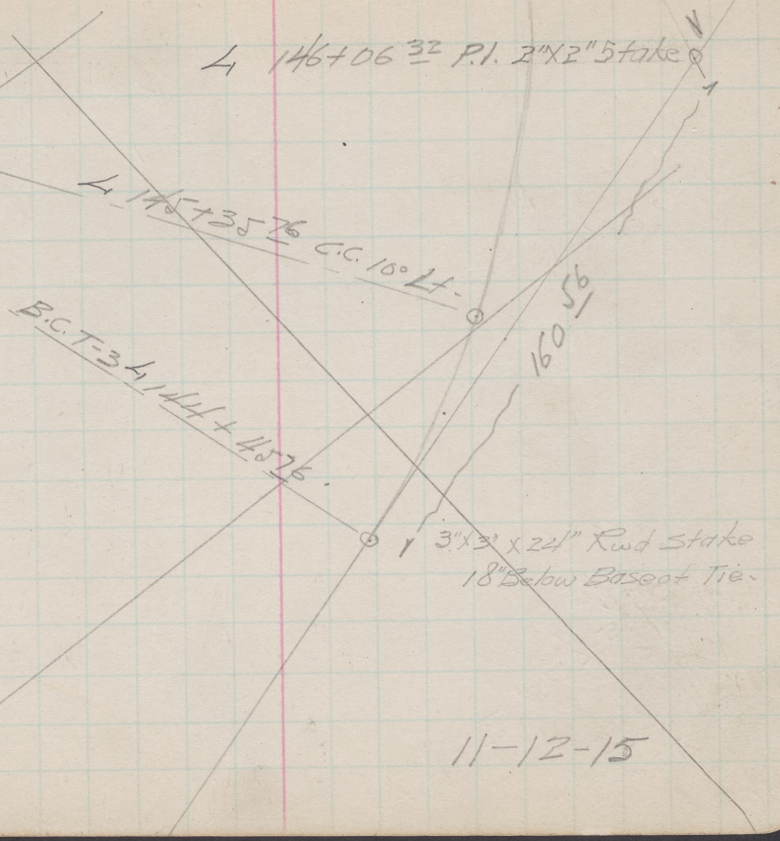
T-4
Δ = 8°20 1/2'
Arc = 93.00
Ch. = 92.92
Back ∠ = 5°19 7/8'

18° Curve T-4
Δ = 76°36'
S.T. = 299±
R = 318.6±
D = 320±
t = 56±



Station	Point	Deflection	Notes
℄ $146+73^{43}$	C.C. T-3	6°53'	10° Lt Δ=13°46'
+50		$5°42^{75}$	Arc=137^{67}
46		$3°12^{75}$'	
+50		$0°42^{75}$'	
℄ $145+35^{76}$	C.C. 10° Lt	0°00'	

Station	Point	Deflection	Notes
℄ $145+35^{76}$	C.C. 10° Lt	1°45'	T-3 Δ=4°30'
$5+05^{76}$		0°56 1/4'	Arc=90'
$+75^{76}$		0°22 1/2'	
℄ $144+45^{76}$	B.C. T-3	0°00'	



11-12-15

- Realignment -

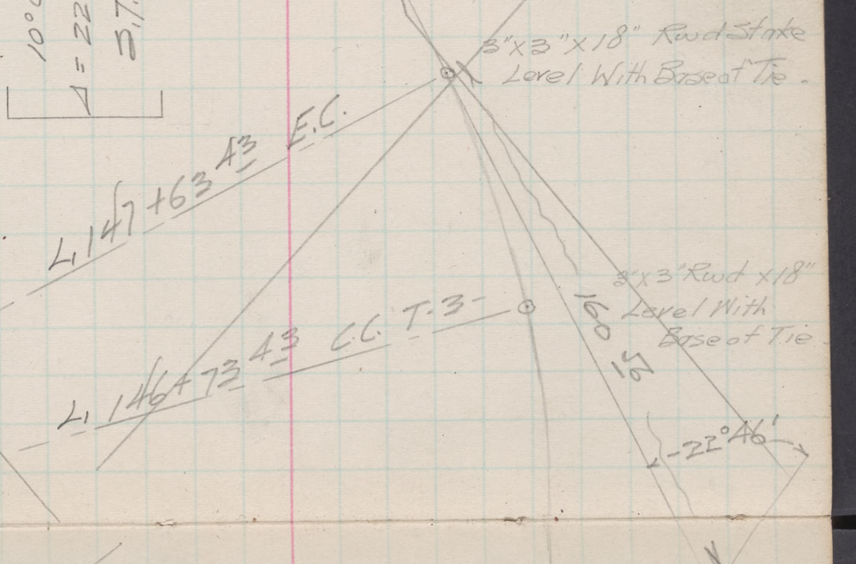
L 148+10 28	B.C. T-3. Rt		
L 147+63 43	E.C.	2°45'	
7+33 43		2°03¾'	
7+03 43		1°07½'	
L 146+73 43	C.C. T-3	0°00'	

Abandonned

See Pages 23 & 24

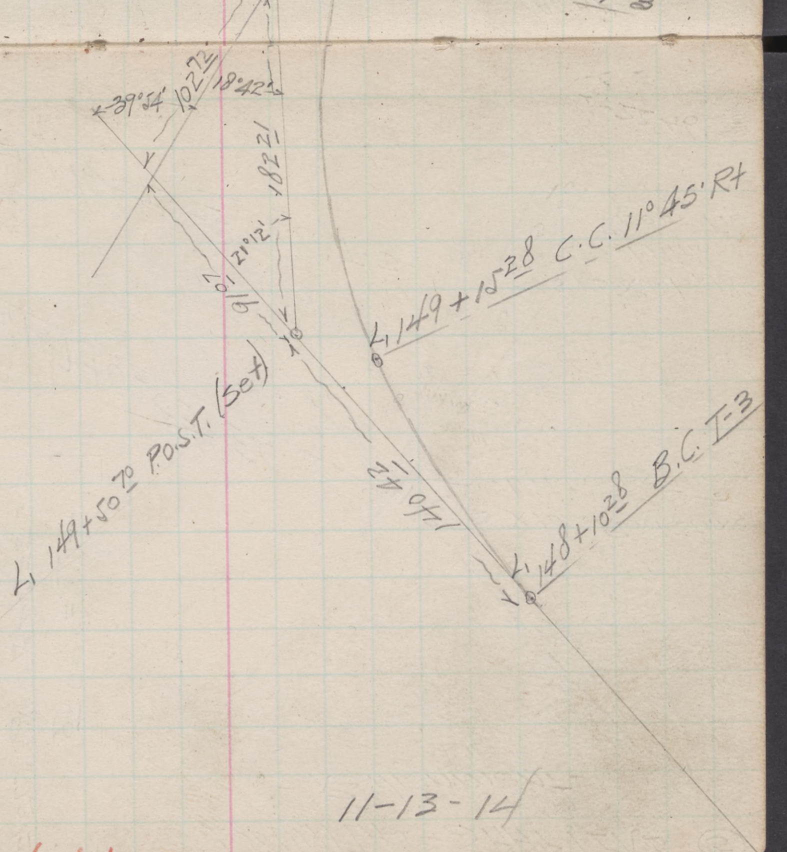
T-3 Δ = 4°30'
Arc = 90 00

10° Curve Lt.
Δ = 22° 46'
R = 573 14
T. = 160 15



51		10°51 1/8'	11°45' Curve Rt.
+50		7°54 7/8'	Δ = 27°55'
50		4°58 5/8'	Arc = 237.45
+50		2°02 3/8'	S.T. 231.49
L. 149+15.28	C.C. 11°45' Rt.	0°00'	
			Cut
149+05.01			
L. 149+15.28	C.C. 11°45' Rt.	2°15'	T-3 Δ = 6°00'
9+00.28		1°45'	Arc = 105.00
+70.28		0°56 1/4'	Ch = 104.95
+40.28		0°22 1/2'	
~~L. 148+10.28~~	B.C. T-3	0°00'	
L. 148+12.83	B.C. T-3 = "C" 148+09.77 P.O.T.		
148+00.01			

(from Page 25)



11-13-14

✓ = Checked by G.A.R. - Nov. 1920

"L1 Line"

LAGUNITAS - SHAFTERS

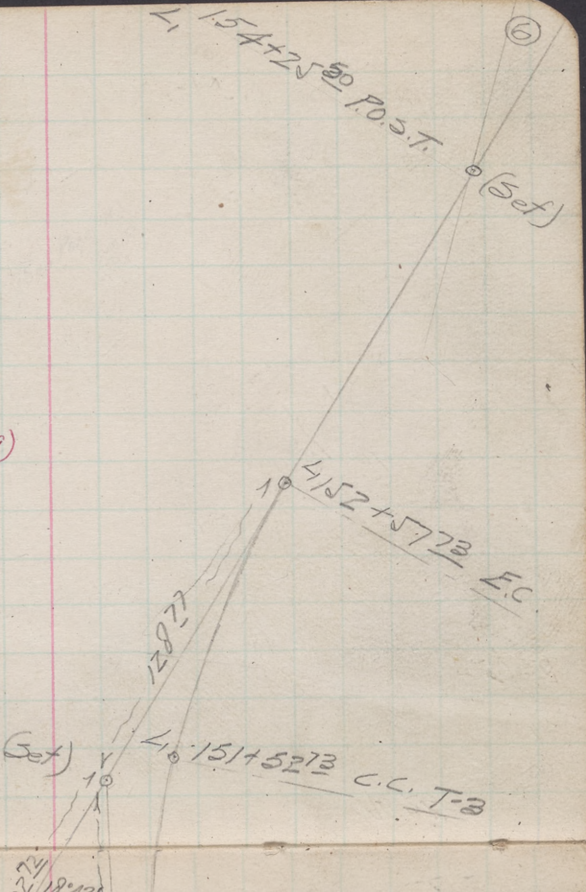
- Realignment -

To Page - 9

~~L1 152+57.73~~	E.C. (L1 152+60.28 E.C.)	0°00'	= "C" 152+57.42 (See Page 19)
52+27.73	152+47.46 ✓	0°22½'	
+97.73		0°56¼'	
+67.73		1°45'	
(L1 151+52.73)	C.C. T-3	2°15'	
151+42.46 ✓			
(L1 151+52.73)	C.C. T-3	13°57'	

T-3
Δ = 6°00' ✓
Arc = 105.00 ✓
Ch. = 104.95

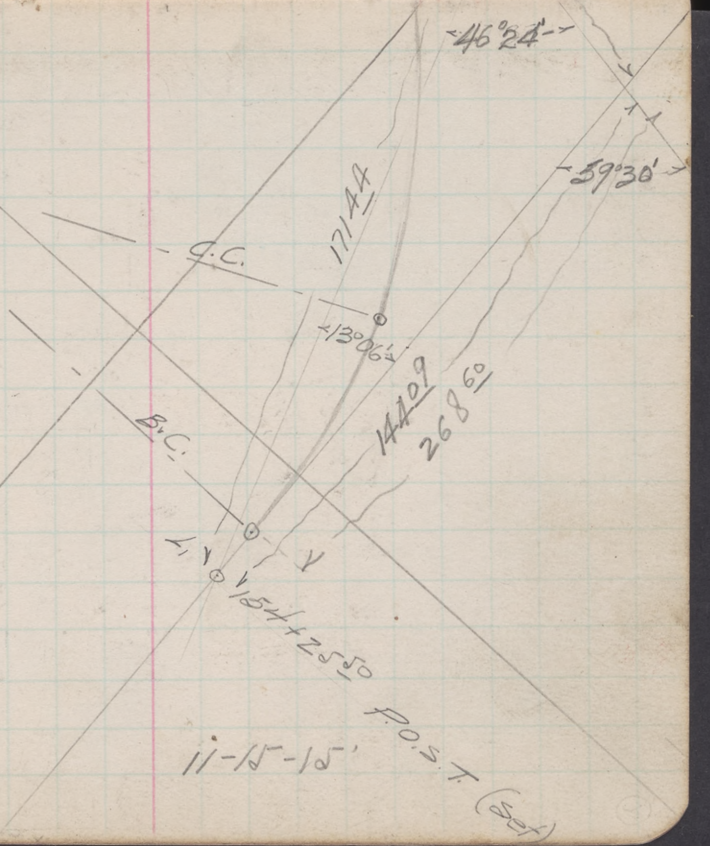
11°45' Curve T-3
Δ = 39°54'
R = 487.84
S.T. = 231.49 ✓
E = 53.89 ✓
D = A.8929



+50		12°36'
55		9°06'
+50		5°36'
54		2°06'
4,153+69.99	C.C. 14° Lt	0°00'
4,153+69.99	C.C. 14° Lt	1°47¼'
+60.99		1°24⅜'
+45.99		0°52½'
+30.99		0°28⅛'
+15.99		0°11¼'
4,153+00.99	B.C. T-4	0°00'

[14° Curve Lt
Arc = 350.36]

[T-4 Δ = 4°52½'
Arc = 69.00 Ch = 68.97
D = 4°10'18 t = 34.16
Lat = 2.15 Dep = 68.94]

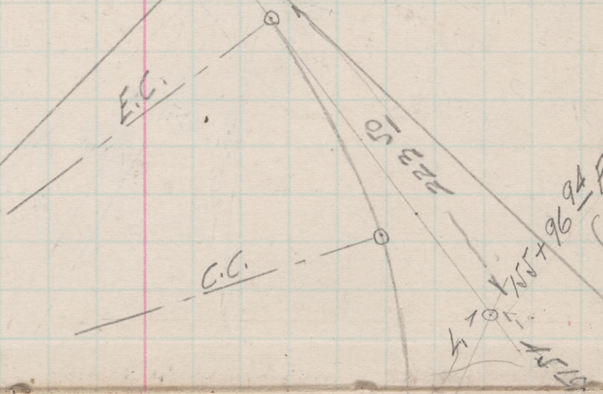


LAGUNITAS - SHAFTERS
- Realignment -

L.157+94^{35}	E.C.	0°00'	T-4 Δ = 4°52½'
+79^{35}		0°11¼'	
+64^{35}		0°28⅛'	
+49^{35}		0°52½'	
+34^{35}		1°24⅜'	
L.157+25^{35}	C.C. T-4	1°47¼'	
L.157+25^{35}	C.C. T-4	24°52½'	Δ = 49°45'
57		23°06'	
+50		19°36'	
56		16°06'	

Abandonned
See Pages 9 & 10

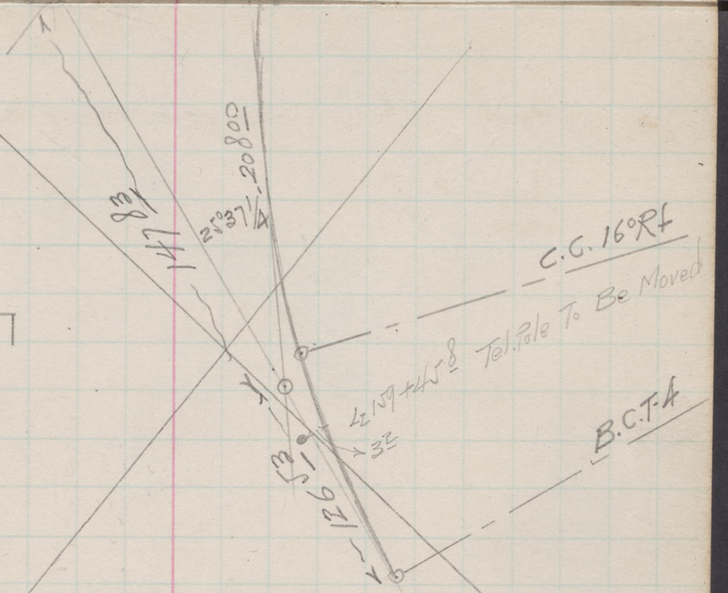
14° Curve Lt T-4
Δ = 59°30' R = 409.27
S.T. = 268.60



62		17°11 1/4'
+50		13°11 1/4'
61		9°11 1/4'
+50		5°11 1/4'
60		1°11 1/4'
		0°00'
4159+85.15	C.C. 16°Rt	2°22 3/8'
+79.15		2°03 3/4'
+64.15		1°24 3/8'
+49.15		0°52 1/2'
+34.15		0°28 1/8'
+19.15		0°11 1/4'
4159+04.15	B.C. T-4	0°00'

16° Curve Rt
Δ = 53°07.5'
Arc = 332.03

T-4 Δ = 6°31 1/2'
Arc = 81.00 Ch = 80.96
D = 359.41 T = 40.18
Lat = 80.89 Dep 3.33



11-15-15

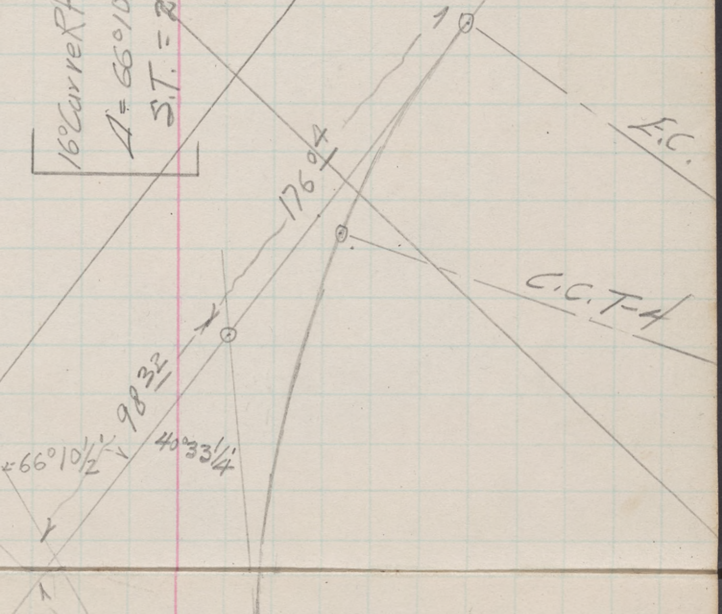
LAGUNITAS-SHAFTERS-
- Realignment -

Abandonned
See Pages 9 & 10

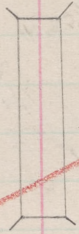
4,163+98 18	E.C.	0°00'
+83 18		0°11¼'
+68 18		0°28⅛'
+53 18		0°52½'
+38 18		1°24⅜'
+23 18		2°03¾'
		2°22⅜'
4,163+17 18	C.C.T-4	26°33¾'
63		25° 11¼'
+50		21° 11¼'
62		17° 11¼'

[T-4 Δ = 6°03½'
Ac = 81.00]

[16° Curve Rt T-4
Δ = 66°10½' R = 358.39
S.T. = 274.36]



~~L 167+60.3~~	E.E. Trestle 25-L	L2 167+77.56
~~L 164+82.0~~	W.E. Trestle 25-L.	L2 164+99.26
~~L 163+98.18~~	~~E.C.~~	



Trestle 25-L.
Length = 27.83

~~L 163+98.18~~ E.C.

LAGUNITAS - SHAFTERS -
Realignment

✓ = Checked by G.A.R. - Nov. 1920

LAGUNITAS TO SHAFTERS

L1 Line

+97		14°45 3/4'	
+50		10°31 1/2'	
5+05		6°28 1/2'	
+50		✓ 1°31 1/2'	
154+22 78 ✓		0°00'	
L2 154+33 05	C.C. 18° Lt.	3°00 5/8'	Center Punch Mark on Rail.
+15 05			
4+00 05		1°24 3/8'	
+85 05			
+70 05		0°28 1/8'	
+55 05			
~~L2 153+40 05~~	B.C. T-4	5°19 7/8 0°00'	
L1 153+42 66 = "C" 153+39 72 P.O.T. (See Pg. 19)			
153+29 78 ✓			
~~L2 153+00 99~~	~~P.O.T. =~~		
L1 153+00 99	B.C. T-4 =	from - Page - 6.	

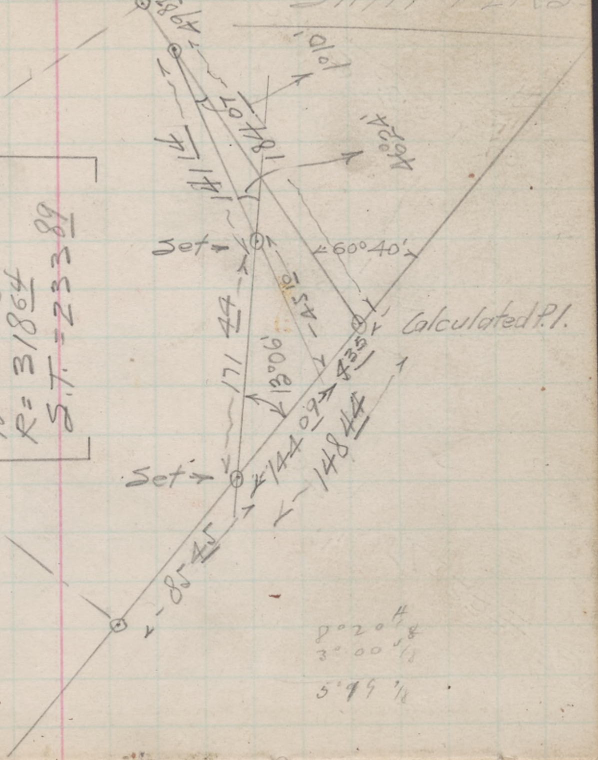
[18° Curve Lt. Δ = 43°57' Arc = 244.35]

[T-4 Δ = 8°20 1/2' Arc = 93.00 Ch. = 92.92 D = 320.15 t = 46.56]

L1 E.C.

L2 B.C.

[18° Curve T-4 R = 318.64 S.T. = 233.89]



8°20 4/8
3°00 5/8
5°19 7/8

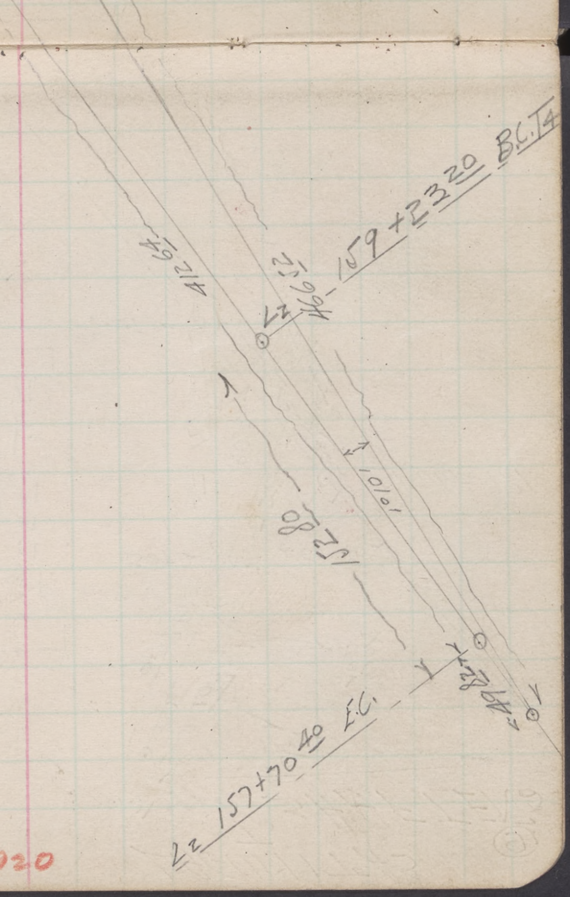
+53 20		0°28 1/8'
+38 20		
L2 159+23 20	B.C. T-4	0°00'
159+12 55 ✓		
157+60 13 ✓		
L2 157+70 40	E.C.	0°00'
+55 4		0°11 1/4'
+40 4		0°28 1/8'
+25 4	Δ x	0°52 1/4'
7+10 4		1°24 3/8'
+95 4		
156+67 13 ✓		3°00 5/8'
L2 156+77 40	C.C. T-4	21°59 1/2'
L2 156+50		19°31 1/2'

T-4 Δ = 8° 20
Arc = 93 00

8°-2

T-4 Δ 8°20 1/2
Arc = 93 00

SHAFTERS - CAMP BERKELEY
- Realignment -



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"L1 Line

+45 63		
+30 63		1°24 3/8'
L2 163+15 63		
162+86 43 ✓		3°00 5/8'
L2 162+97 63	C.C. T-A	
+50		
2		
+50	✓	
1	✓	
+50	✓	7° 33
160+05 55 ✓	33.8	0°00'
L2 160+16 20	C.C. 18° Rt	3°00 5/8'
+98 20		
+83 20		1°24 3/8'
+68 20		

8°24'

T-A Δ = 8°20 1/2'
Arc = 93 88

18° Curve Rt
Δ = 50°39 1/2'
Arc = 281.43

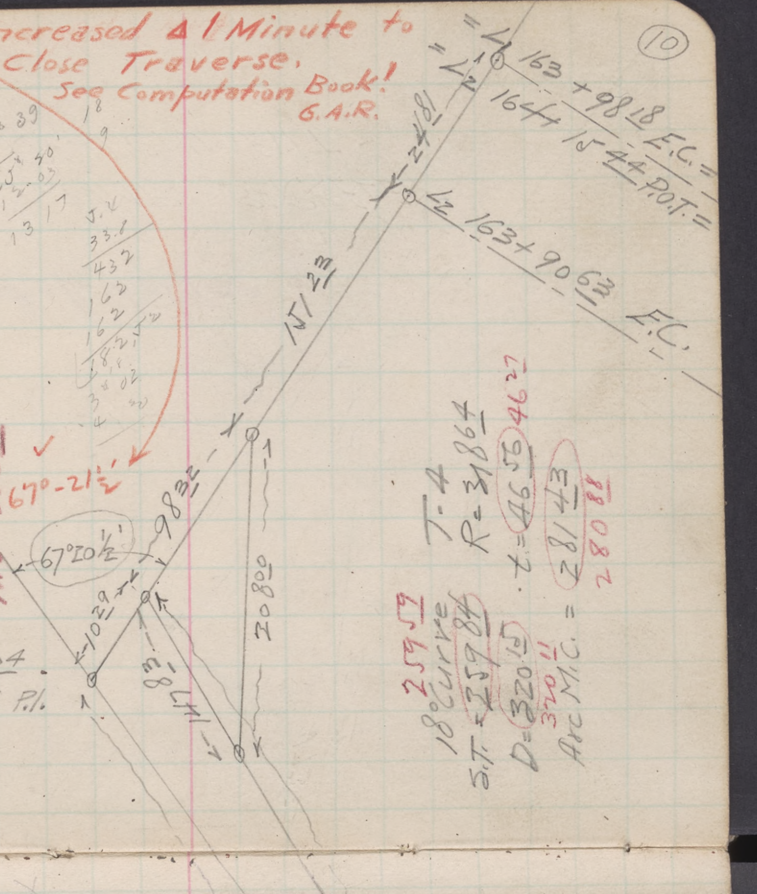
Δ = 50°-33 1/2'
Arc = 280.88 ✓

67°-21 1/2'

8°-24'
20 1/2
93 88

Increased Δ 1 Minute to Close Traverse. See Computation Book! G.A.R.

L2 161+83 04
Calculated P.I.



T-A
R = 3186 4
T = 46.55 (46.27)
281.43 (280.88)

18° Curve
S.T. = 259.84 (259.57)
D = 320.10 (320.11)
Arc M.C. =

9 + 12 ^{28} | 0°18'

L_2 168 + 82 ^{28} | B.C. T-2 3/4 | 0°00

~~L_2 164 + 15 ^{44} P.O.T.~~

~~L_1 163 + 98 ^{18} E.C. =~~

~~L_2 164 + 15 ^{44} P.O.T. =~~

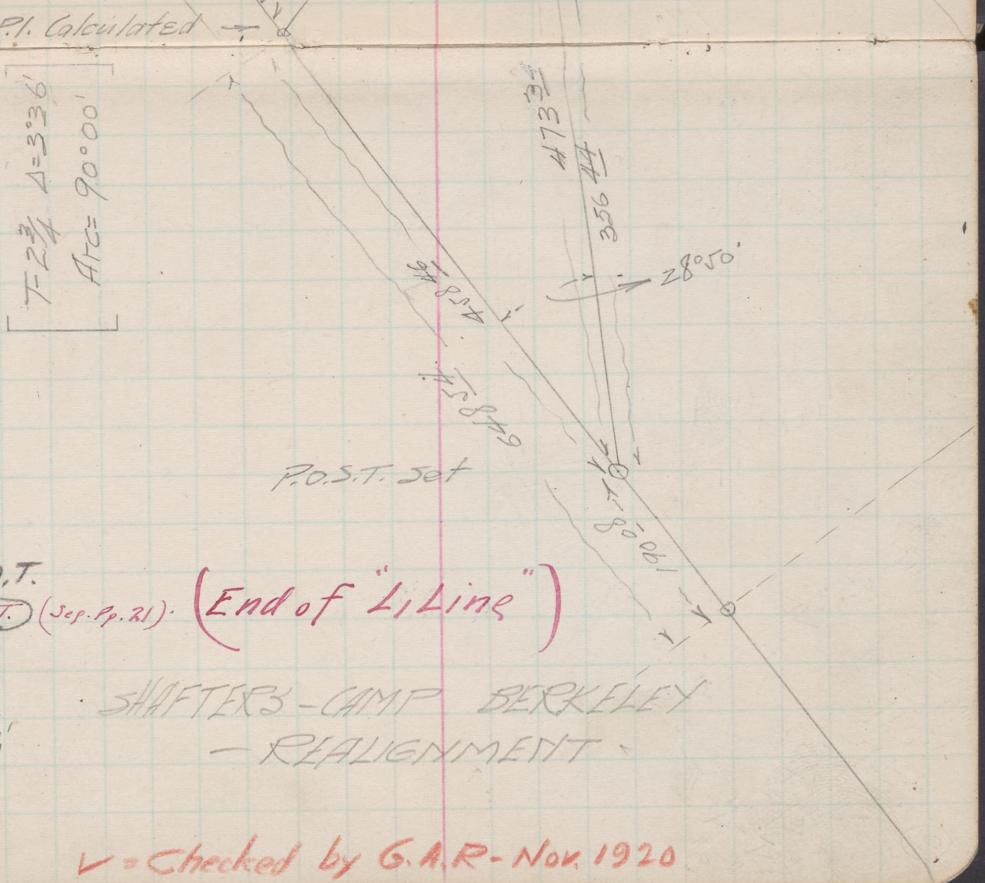
163+79 ^{43} ✓ = "C" 163+80 ^{05} ✓ P.O.T.

L_1 163 + 93 ^{18} E.C. = "C" 163+81 ^{36} P.O.T. (See Pg. 21). (End of "L_1 Line")

~~L_2 163 + 90 ^{63}~~ E.C. = | 0°00

+ 75 ^{63}

L_2 163+60 ^{63} | 0°28 1/8'



SHAFTERS - CAMP BERKELEY
- REALIGNMENT

✓ = Checked by G.A.R - Nov. 1920

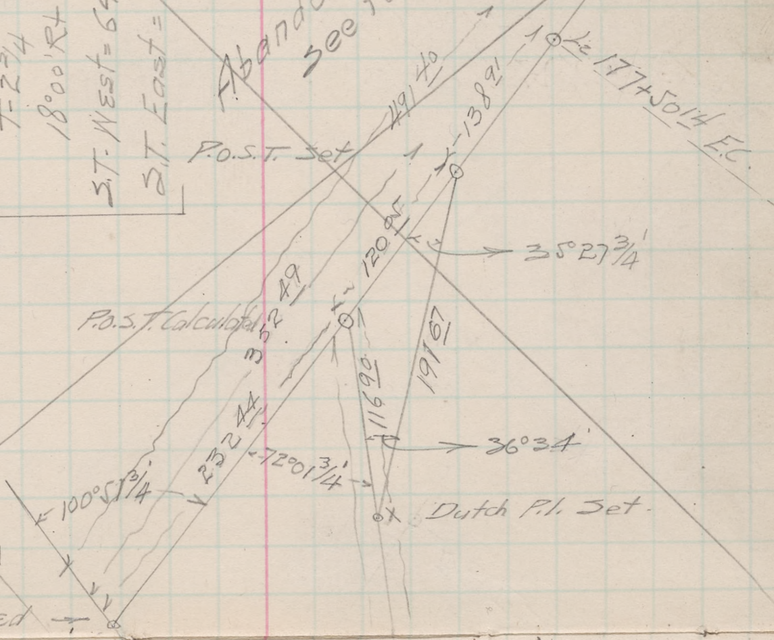
"L_1 Line"

Station	Curve	Deflection
+54		12°26 ½
74		7°34 6
+50		3°04 6
		0°00'
L_2 173+15 82	C.C. 18° Rt	13°44½'
73		13°06½'
+50		11°06½'
72		9°06½'
+50		7°06½'
71		5°06½'
+50		3°06½'
70		1°06½'
		0°00'
L_2 169+72 28	C.C. 8° Rt	1°24'
+42 28		0°45'

T = 22¾ 8°00' Rt T-?
18°00' Rt
S.T. West = 648 5?
S.T. East = 491 40

8°00' Curve Rt
Δ = 27°29'
Arc = 343 54

Abandonned.
see Pages 26 & 25



L_2 177+50$\frac{14}{}$	E.C.	0°00'	
+35$\frac{14}{}$			
+20$\frac{14}{}$		0°28$\frac{1}{8}$'	
+05$\frac{14}{}$			
6+90$\frac{14}{}$		1°24$\frac{3}{8}$'	
+75$\frac{14}{}$			
		3°00$\frac{5}{8}$'	
L_2 176+57$\frac{14}{}$	C.C. T-4	30°43$\frac{2}{}$	
+50		30°04$\frac{6}{}$	
76		25°34$\frac{6}{}$	
+50		21°04$\frac{6}{}$	
L_2 175		16°34$\frac{6}{}$'	

T-4 Δ = 8°20½'
Arc = 93.00

18°00' Rt
Δ = 61°26'25"
Arc = 341.32

B.C. T-2

SHAFTERS - CAMP BERKELEY
- Realignment -

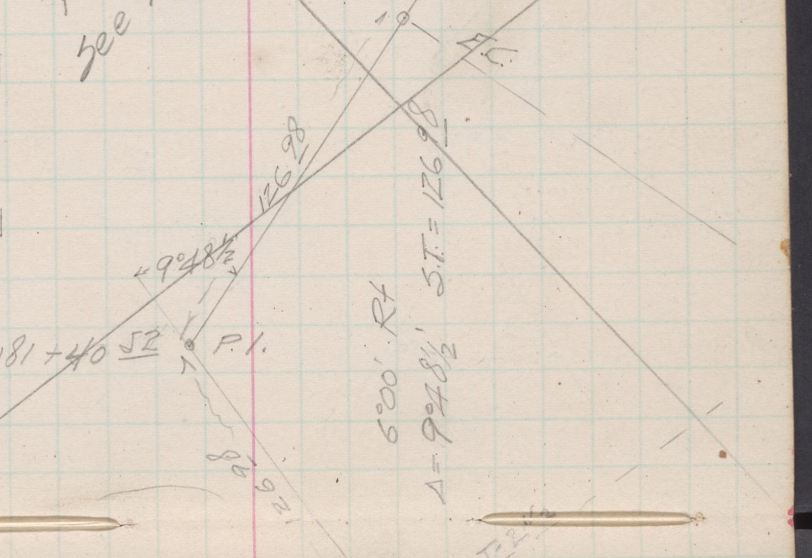
L2 182+67.01	E.C.	1°39'
+37.01		1°14¼'
2+07.01		0°40½'
		0°00'
L2 181+77.01	C.C. T-2½	2°12.25
+50		1°23.6
		0°00
L2 181+03.54	C.C. 6°00' Rt	1°03'
+73.54		0°33¾'
+43.54		0°13½'
L2 180+13.54	B.C. T-2½	0°00'

T-2½ Δ=2°4½' Arc-90.00

6°00' Curve Δ=4°24½' Arc=73.47

T-2½ Δ=2°4½' Arc=90.00

Abandonned
see Pages 27 + 26



from Pagee. 28

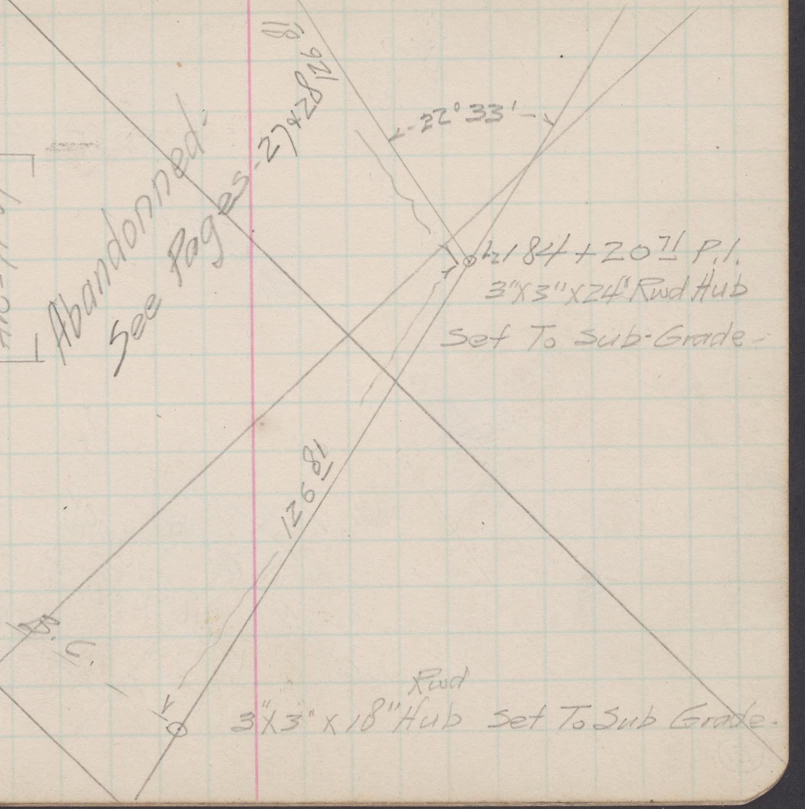
+84.97		1°43½'
L_2 184+54.97	C.C. T-2 7/8	0°00'
L_2 184+54.97	C.C. T-2 7/8	4°58.5'
4+20		2°31.6'
L_2 183+83.90	C.C. 14° Lt	0°00'
L_2 183+83.90	C.C. 14° Lt	2°16½'
+53.90		1°07½'
3+23.90		0°22½'
L_2 182+93.90	B.C. T-2 7/8	0°00'

T-2 7/8 Arc

14° Curve Lt
Δ = 9°57'
Arc = 71°07'

T-2 7/8 Δ = 6°18'
Arc = 90.00

Abandonned:
See Pages 27+28



"L2 Line"

SHAFTERS-CAMP BERKELEY

- REALIGNMENT -

(13)

193+96.63				
L2 193+99.55	C.C.T-2½	3°34½'	[6°00' Lt; Δ = 7°09'; Arc = 119.17]	0.25 Rt
+50		2°05¾'		0.04 Rt
193		0°35¾'		0.82 Lt
	{10.62	0°00'		
192+77.46 / L2 192+80.38	C.C. 6° Lt	1°03'	[T-2½; Δ = 2°42'; Arc = 90.00]	1.38 Lt
+50.38		0°33¾'		2.00 Lt
2+20.38		0°13½'		2.22 Lt
191+87.46 / L2 191+90.38	B.C. T-2½	0°00'		2.15 Lt
+50				2.00 Lt

Intermediate Tangent = 2.00' Ft. To Left   12-15-15

+42.06 / L2 185+~~44.97~~	E.C.	4°01½'	[Δ = 6°08'; = 90.00]	
5+14.97		3°04½'		

E.C.

3"X3"X24" Rwd Hub Set To Sub-Grade.

from Page 28

L2 193+40.45 P.I.

← To Page 28 —

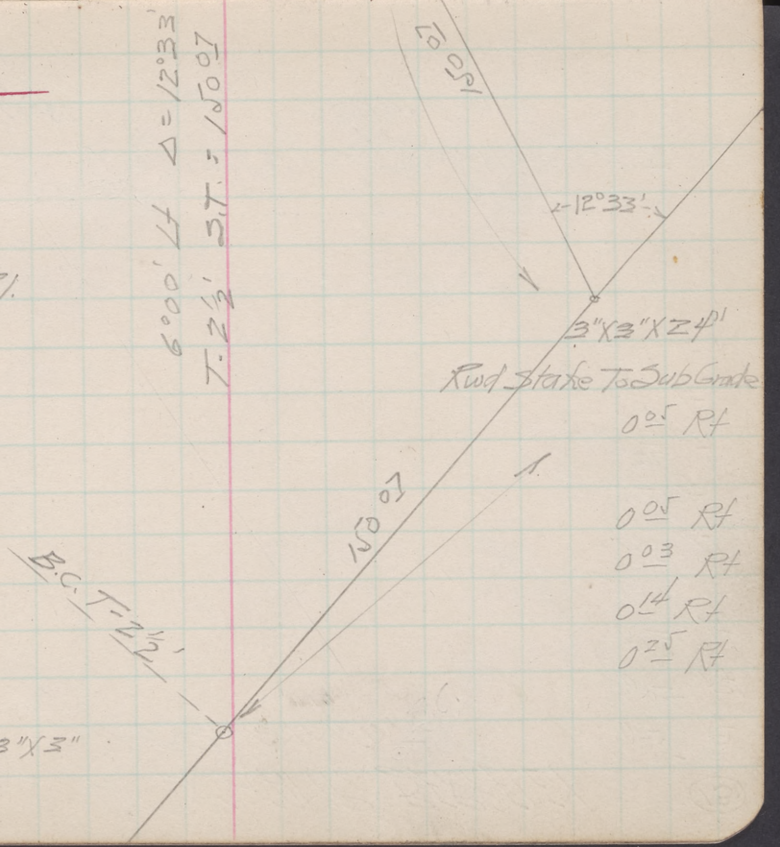
95+50

194+86.63

L2	~~194+89.55~~	E.C.	1°29'
	+59.55		1°14¼'
	4+29.55		0°40½'
L2	~~193+99.55~~	C.C.T-2½	0°00'
	193+96.63		

T-2½' Δ=2°42'
Arc-90.00

6°00' Lt Δ=12°33'
T-2½' S.T.=150.07



Rwd Stake To Sub Grade
0.05 Rt

0.05 Rt
0.03 Rt
0.14 Rt
0.25 Rt

L2 Line.

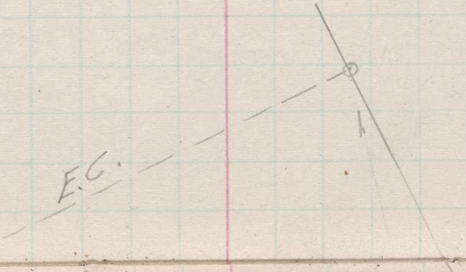
L2 196 + 88.63	C.C. 8°L	1°24'
+ 58.63		0°45'
6 + 28.63		0°18'
L2 195 + 98.63	B.C. T-2 3/4	0°00'

[T-2 3/4 $\Delta = 3°36'$ Arc = 90.0]

Abandonned See Pages 28 & 29

SHAFTERS - CAMP BERKELEY

- Realignment -

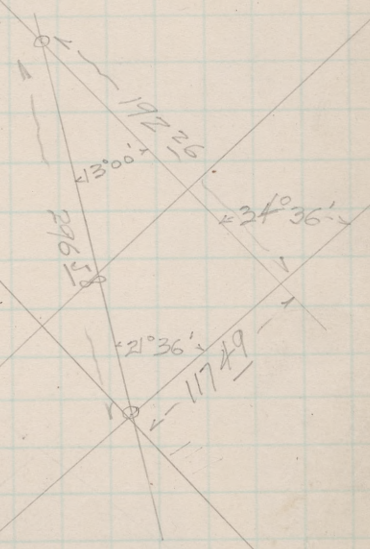


L_2 201+21.13	E.C.	2°12'
+91.13		1°39'
+61.13		0°54'
		0°00'
L_2 200+31.13	C.C. T-2 3/4	13°42.0'
0		12°27.3'
+50		10°27.3'
9		8°27.3'
+50		6°27.3'
8		4°27.3'
+50		2°27.3'
7		0°27.3'
L_2 196+88.63	C.C. 8° Lt.	0°00'

T-2 3/4 Δ = 3°36'
At = 90.0'

8° Curve Lt.
Δ = 27°24'
Arc = 342.5'

Abandonned
Pages 28 & 29



SHAFTERS - CAMP BERKELEY

- Realignment -

38 + 40			0^{04} Lt
+ 65			0^{13} Lt.
37			0^{17} Lt
36 + 53.29	E.C.	3°39½'	0^{14} Lt
36		3°16'	0^{34} Lt
35 + 50		2°52½'	0^{92} Lt
34 + 90		2°22'	1^{24} Lt
+ 50		2°08½'	2^{01} Lt
34		1°46'	2^{01} Lt
+ 50		1°23½'	1^{84} Lt
33		1°01'	1^{34} Lt
+ 50		0°38½'	0^{63} Lt
32		0°16'	0^{09} Lt
31 + 64.4	B.C. 1°30' Rt = 0°00'		℄
31 + 64.4	P.O.T. =		

P.I. = 34+09.17
1°30' Curve Δ = 7°19'
S.T. = 244.77 Arc = 488.89
- New -

- Old -
2°00' Curve Δ = 7°19'
S.T. = 183.17 Arc = 366.67

P.S. East Switch San Geronimo

– CURVE AT SAN GERONIMO –

11-29-15

Alignment Changed To
–Avoid Rock Cut.

—

39 + 50

0.06

139

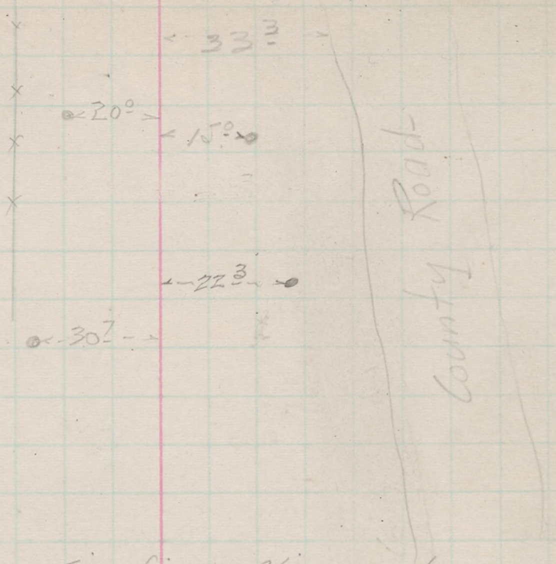
138 + 70.8 — P.S. East Sw. — Lead = 45.7
+ 68.5 — Tel. Pole on Lt.
+ 49.6 — Telefone Pole.

138

C – 137 + 78.22 — E.C.
137 + 27 — Phone Pole
137 + 10.0 — Tel. Pole

13°46' Lt.
Δ = 82°50½'
S.T. = 367.41 — Ac = 601.76
R = 416.44
H 1/5 ℄

C – 131 + 76.46 — B.C. 13°46' Lt.



– Existing Alignment –
To Establish ℄ of R. of W.

– LAGUNITAS – SHAFTERS –

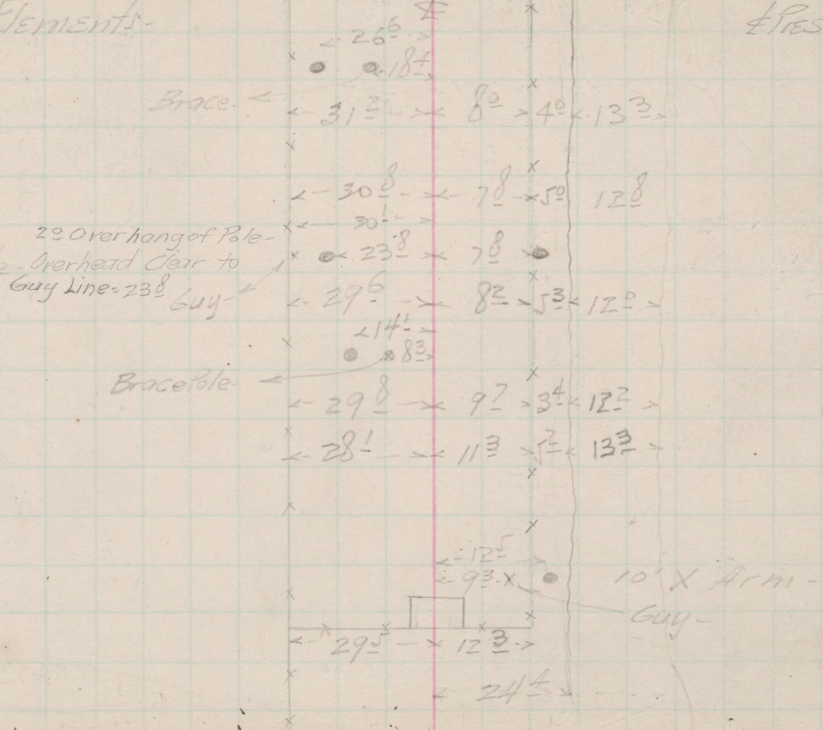
C – 131 + 76.46 — B.C.T. =

Revol. 131 + 76.40 — B.C. 13°45' Lt =

"C" Line

Present Alignment — 12-6-15

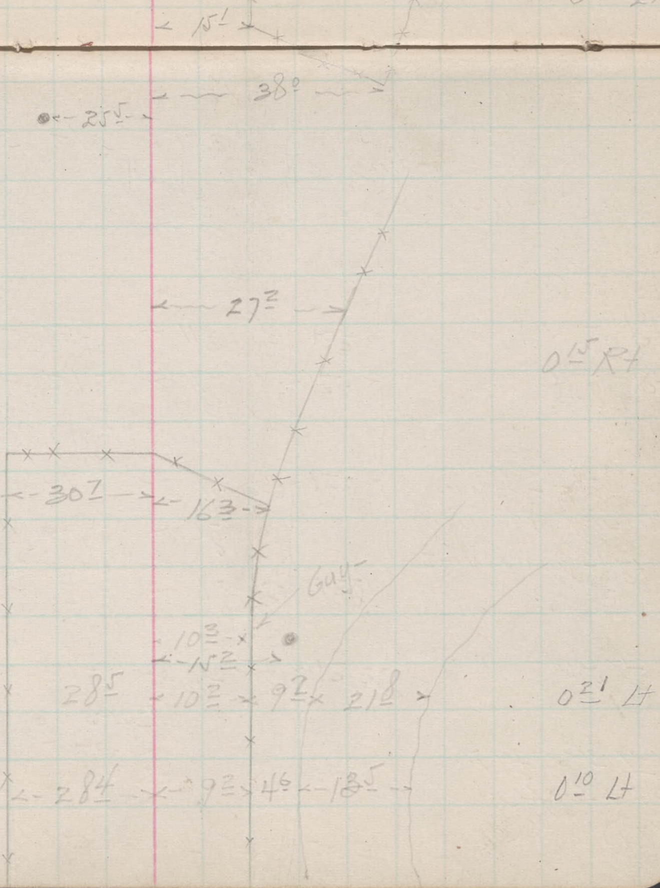
Stationing	Description	Curve Elements	Offsets to ℄ Present Track
+18	Tel. Pole		
142			0^{13} Lt
+50			0^{05} Lt
+46^5	Telephone Pole & Guy Pole		
141			℄
+74^1	Tel. Pole		
+50			0^{58} Rt
140			0^{62} Rt
139+83^{02}	B.C. 20°32' Rt		0^{34} Rt
+70^5	Phone Pole		
+63^7	Pit Cat Gd - 25-6		
+50			



+49 1	Fence Corner
+37 1	Fence Corner
+36 0	E.E. Trestle 25-H ℄ Tel. Pole
+50	
144	
+60	
143 +47 47	E.C.
+44 6	Fence Line ℄ Cor.
+31 7	Fence Intersection
+30 8	W.E. Trestle 25-H
+11 5	Phone Pole ℄ Guy
143	
142+50	

LACUNITAS SHAFTER R
Existing Alignment
To Establish ℄ R. of W.

20°32' Curve Rt
Δ = 74°50' S.T. = 213.25
Arc = 364.45 R = 279.11



"C" Line

Stationing	Description	Curve Elements	℄	Offsets to ℄ Present Track
148				℄
+78.8	Tel. Pole		● ← 25.7 →	
Const. 147+62.92 P.O.T. = L, 147+63.43 E.C. = L2 147+65.98 ⊙				
147				0.03 Lt
146+69.36	E.C.			0.46 Lt
+60	End of Fence		← 20.4 → x	
+50				0.N Lt
		11°45' Lt Δ = 24°05'		
		S.T. = 104.06 Arc = 204.9[illegible]		
		R = 487.84		
146			← 22.7 →	0.10 Lt
+67.0	Tel. Pole		● ← 34.0 →	
+50			← 27.1 →	℄
145			← 22.2 →	0.02 Lt
144+64.39	B.C. 11°45' Lt			0.05 Lt
+49.1	Fence Corner		← 15.1	

+47	End of Fence	← 27.7 →	
150		← 29.0 →	℄
+92.1	℄ Water Tank 19,460 Gals.	←8.9→ (18.3)	
+53.5	Tel. Pole	← 21.5 →	
+50		← 31.4 →	℄
149		← 32.5 →	0.06 Rt
148+54.94	B.C. 11°10' Rt		0.22 Rt
148+50		← 33.0 →	0.12 Rt
Const 148+09.77 P.O.T.	= L, ~~148+10.26 B.C.~~ L, 148+12.83 B.C.		
8+02.0	Fence Corner	← 36.3 →	

11°10' Curve
S.T. = 186.32
Arc = 357.31
Δ = 39°54'
R = 513.30

LAGUNITAS - SHAFTERS
Existing Alignment
To Establish ℄ R.o.W.

See Page 6

'C' Line.

Stationing	Description	Curve Elements	℄	Offset to ℄ Present Track
Const. 153+39^{72}	P.O.T. =	~~L_2 153+40^{05} B.C.~~ L_1 - 153+42^{6} B.C.		℄
Const. 152+57^{42}	P.O.T. =	L_1 152+57~~^{73}~~ E.C. L_1 152+60^{28} E.C.		℄
152+12^{25}	E.C.			0^{15} Rt
152				0^{20} Rt
+66^{5}			←30'→	
+50				℄
+10^{3}	Box Culv. 25-1	12"x18" Rwd-	←19^{6}→ ←8^{0}→	
151				0^{22} Lt
+72	2" Pipe to Tank - Xes Track-			
+50				0^{12} Lt

+50		0^{03} Rt
√		0^{05} Rt
+50		0^{05} Rt
154		0^{35} Lt
153 + 72 $^{\pm 8}$	B.C. 20°30' Lt	0^{26} Lt
153 + 50		
153		
152 + 50		

Δ = 41°32¾' Arc = 202.66

20°30' Curve

279.87

LAGUNITAS-SHAFTERS-
Existing Alignment-
To Establish ℄ R. of W.

"C" Line

Stationing	Description	Curve Elements	℄	Offset to ℄ Present Track
158+13.71	E.C.	17° Curve, Δ=16°5¾', Arc=95.66		0.32 Lt
8				0.20 Lt
+50				0.30 Lt
157+18.05	C.C. 17° Lt			0.13 Lt
7		2° Curve, Δ=2°51½', Arc=142.91		0.13 Rt
+50				0.27 Rt
6		Total Δ = 60°40' {S.T. West = 211.31, " East = 279.34		0.23 Rt
155+75.14	C.C. 2° Lt			0.12 Rt
+50				0.03 Rt

$+75^{06}$			0^{07} Lt
$1+25^{06}$			0^{12} Lt
$+75^{06}$			0^{08} Lt
$160+25^{06}$			0^{25} Rt
$159+75^{06}$	B.C. 18°40' Rt		0^{43} Rt
+50			℄
159			0^{13} Lt
158+50			0^{10} Lt

18°40' Curve
$\Delta = 67°20\frac{3}{4}'$ Arc = 36…
$2T = 204.72$

LAGUNITAS - SHAFTERS.
Existing Alignment
To Establish ℄ R. of W.

"C" Line.

Stationing	Description	Curve Elements - ℄	Offset to Present ℄ Track
165			℄
C-164 +90'	N.E. Trestle 25-L	Length = 278³	℄
+50			℄
164			℄
Const. 163+81 ^{36} P.O.T.	~~= L₂ 163+90 ^{63} E.C. = L₂ 163+84 ^{28} P.O.T.~~ = L, 163+93 ^{18} E.C. (See Page 11)		
163 +35 ^{83}	E.C.		0 ^{64} Rt
+85 ^{83}			0 ^{48} Rt
2 +35 ^{83}			0 ^{25} Lt
+85 ^{83}			0 ^{17} Lt
+75 ^{06}			0 ^{07} Lt

12° Rt

9 ℄

+50 ℄

8 ℄

+50 ℄

7 ℄

+50 ℄

6 ℄

L- 165 + 50 ℄

"C" Line.

LAGUNITAS - SHAFTERS -
Existing Alignment to Establish ℄ R. of W.

C-169+78.35 BC. 12° Rt = ℄ 169+81.27 (See Page #32) 0± Rt
+50 ℄

12° R

139 + 79 32 ✓

+89 14

+59 14 | 1°24 3/8' | 8 35 Rt

T-4 Δ = 8°14' ✓
Arc = 93 00 ✓
Back Defl. = 5°23 3/8'
Chord = 92 92

9 + 29 14 | 0°28 1/8' | 7 94 Rt

38+99.14
1 30.72
8 42

(138 + 99 14) ✓ B.C. T-4 | 0°00' | 6 53 Rt

O.K. J.H.

138 + 86 32 ✓
G.A.R. 10/14/20 (See Note)

138+99.14
137+78.22
1 20 92

Note: Diff. of 12 82 in Eng. Sta's. due ✓ to Alignment change as shown in Book T-22 Page 62.

+50

138

137 +78 22 (E.C. "C" Line) = L, Ling. ∡ 3°05' Lt.

+50

78.22
21.78

Δ = 83° 50 1/2'

137

131+76 46 B.C. 13°46' LT.

(from Page 3)

✓= Checked by G.A.R. - Nov. 1920

143		27° 42 4'	6.28 Rt
+50		23° 12 4'	3.76 Rt
+49		23° 07.0'	
2		18° 42 4'	2.20 Rt
+50		14° 12 4'	9.75 Rt
1		9° 42 4'	2.22 Rt
+50		5° 12 4'	4.39 Rt
140		0° 42 4'	1.90 Rt
		0° 00'	
(139 + 93.14)	E.C. 18° Rt	3° 00 5/8'	7.30 Rt
139 + 79.32 ✓			

18° Curve Rt ∆ = 61°12' ✓

Arc = 340.00 ✓

11° 54'

18° ✓ Rt T-4

∆ = 78°00' ✓ S.T. = 305.49 ✓

R = 318.64 ✓ D = 320.11 ✓ t = 46.27 ✓

P.O.S.T. on East End 82.00 West of E.C.

P.O.S.T. on West End 130.75 East of B.C.

Calculated P.I. 142 + 04.63

0° 12' 34

7° 8'

145+03 71		0°56 1/4	9.8	12 23 Rt
+73 71		0°22 1/2	9.5	12 60 Rt
144+43 71 / 144+30 89 ✓	B.C. T-3	0°00		12 50 Rt
144+25 14 / 144+12 32 ✓	E.C.	5°23 3/8		12 54 Rt
+95 14		4°11		
+65 14		2°28'		11 28 Rt
		0°00'		
143+32 14 / 143+19 32 ✓	E.C. T-4	30°36'		8 71 Rt

T-3 Δ = 1° ✓ Arc = 120 00 ✓

NEW BENCH. 144+42

T-4 Δ = 8°24' ✓ Arc = 93 00 ✓ Back Defl. = 5°23 3/8 Chord = 92 92

30°36'
18 42
11°54

LAGUNITAS - SHAFTERS - Realignment. 12/19/10/15 W.T.R.

CLEARANCE TO BLUFF TO LEFT

APPROX

✓ Checked by G.A.R - Nov. 1920.

MEASURED MARCH 15-'16.

Restaked 12-10-15 See Pages 4 & 5

Station	Description	Deflection	Curve Elements	CLEARANCES FROM DOCK CUT	Offset to ℄ Present Track
145 + 57.04 (circled); 147 + 44.22 ✓ (G.A.R.)	E.C.	4°41¼'			6.05 Lt
7 + 27.04		3°52½'	T-3 Δ = 7°30' ✓		0.05 Rt
+ 97.04		2°48¾'	Ac = 120.00 ✓		0.72 Rt
+ 67.04		1°30'		11.0	2.18 Rt
		0°00'			
146 + 37.04 (circled); 146 + 24.22 ✓	C.C.T-3	4°35'	Arc = 73.33 ✓	12.8	4.30 Rt
146		2°16' (2°19', 2°16')	12°30' Lt	13.0	6.72 Rt
145 + 63.71 (circled); 145 + 50.89 ✓ (G.A.R.)	C.C. 12°30' Lt	0°00'; 2°48¾'	Δ = 9°10' ✓	9.0	9.05 Rt
+ 33.71		1°45'		8.5	15.90 Rt

Total Δ = 24°10'

S.T. = 15.03 ✓

P.I. Set 3"x3"x24" Red Hub

6.31

36.3

LAGUNITAS - SHAFTER'S

Realignment-

12/9 & 10/15 W.T.R.

~~L1 147+63 43 Old E.C. =~~

~~L2 147+65 ?? P.O.T. =~~

To Page-6-

L1 (147+57 04) E.C. = "C" 147+53 98 ok. J.H.S.

L1 147+44 22 ✓

G.A.R.

Sta.	Description	Deflections	Curve Elements	
				Offset to ℄ of Present Tr.
165 + 50				
5				
164 + 93⁰	W. E. Trestle - 25 - L		Length = 278.3	
+ 50				
3				
L2 163 + 84.28	P.O.T. = "C 163+81.36 P.O.T. (-8.9 Eq.)			
~~163 + 90.63~~	~~E.C. =~~			
L, 163+93.18	E.C. = "C - 163+81.36 P.O.T. -			

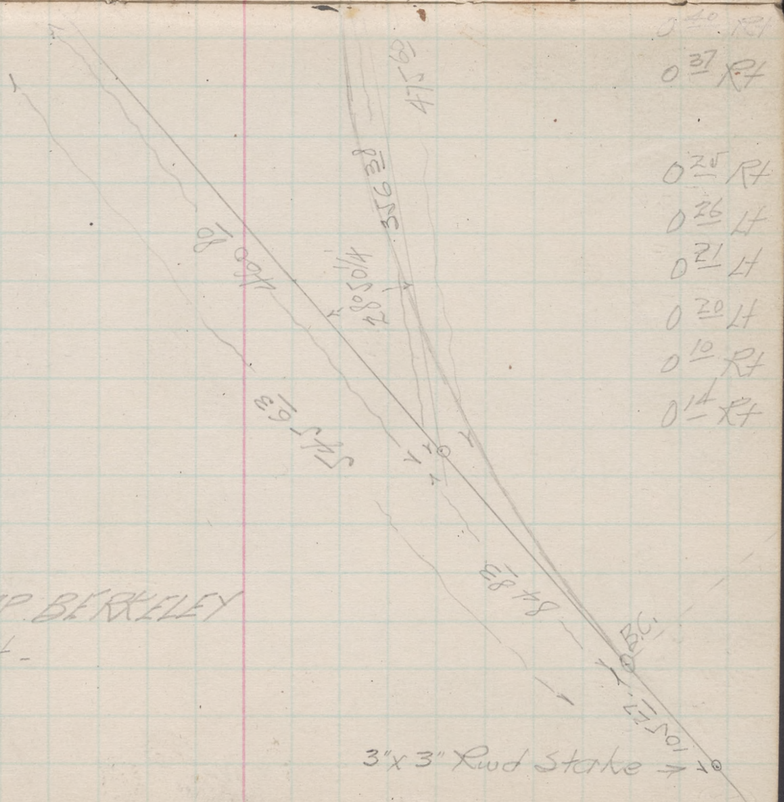
Alignment Same as "C Line USC "C Line (initials)

SHAFTER'S - CAMP BERKELEY -
- Realignment -
12-15-15 W.T.R.-

+50		0°16¼'	2°00' Curve; Δ = 10°16½'; Arc = 96	0.40 Rt
172+22.94	C.C. 2° Rt	0°00'		0.37 Rt
		14°30'		
2		13°07.4'		0.25 Rt
+50		10°07.4'	Δ = 29°00'	0.26 Lt
1		7°07.4'	12° Curve	0.21 Lt
+50		4°07.4'	Arc = 241.67	0.20 Lt
170		1°07.4'		0.10 Rt
169+81.27	B.C. 12° Rt	0°00'		0.14 Rt
+50				
8				
+50				
7				
+50				
6				

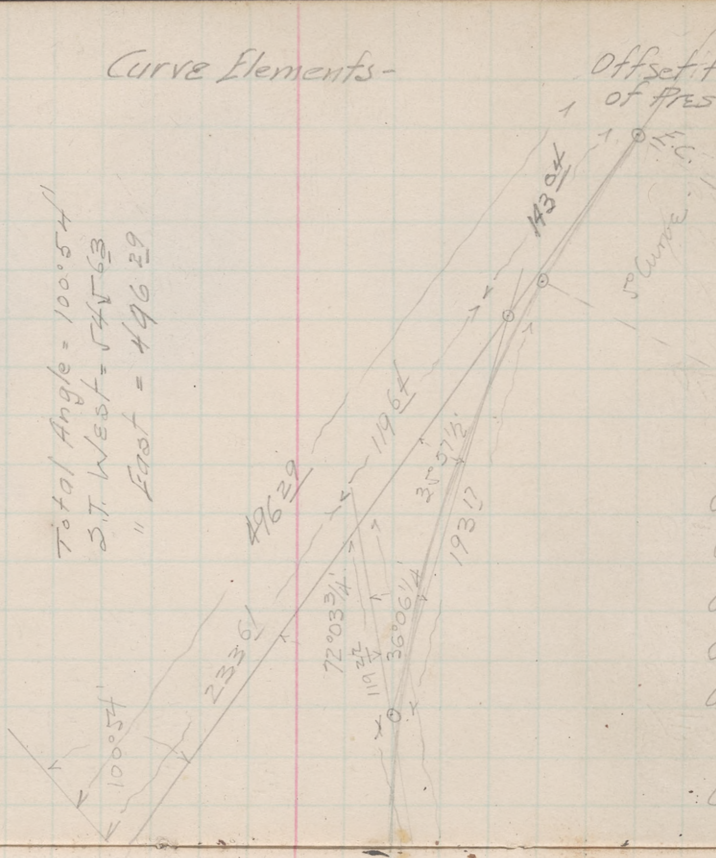
SHAFTER'S - CAMP BERKELEY

- Realignment -



Station	Description	Deflection	Curve Elements-	Offset to ℄ of Present Tr.
177+53.37	P.C.	1°53.75'	5° Curve	0.09 Rt
7+00		0°33.75'	Δ = 3°47½'	0.03 Lt
176+77.49	C.C. 5°00' Rt	0°00'	Arc = 75.83	℄
		33°05 1/8'		
+50		30°32½'	Total Angle = 100°54'	0.05 Rt
6		25°55'	S.T. West = 54.63	0.06 Lt
+50		21°17½'	" East = 496.29	℄
5		16°40'	18°30' Curve	0.38 Lt
+50		12°02½'	Δ = 66°10¼'	0.12 Rt
4		7°25'	Arc = 357.68	0.05 Rt
+50		2°47½'		0.78 Rt
173+19.81	C.C. 18°30' Rt	0°00'		0.87 Rt
		0°58 1/8		
3		0°46¼'	Curve	0.64 Rt
+50		0°16¼'	96.87	0.40 Rt

Same as ℄ Line
Use ℄ Line Page 37



L2 2		3°23 85	P.I. = 181+45 52	
+50		1°53 85	Δ = 10°37'	1 26 Lt
180+83 83		0°23 85	S.T. = 118 27	0 61 Lt
L2 180+86 75	C.C. 6° Rt	0°00'	M.C. Arc = 116 94	0 43 Lt
		0°45'		
+56 75		0°18'		0 20 Lt
180+23 83 L2 180+26 75	B.C.T. 2 3/4	0°00' = "C" 180+23 83		0 16 Lt
		- Diff. - 2 92		
L2 180				0 15 Lt
+50				0 14 Lt
9				0 14 Lt
+50				0 13 Lt
8				0 12 Lt

Use - "C" Line.

See Page 32

SHAFTERS - CAMP BERKELEY

Realignment.

L2 Line

Station	Point	Angle	Notes	Offset
184+52.05 (red)				
L2 184+54.97	C.C.T-2 7/8	5°24'	12-10-15	0^{75} Lt
+50				0^{14} Rt
4			P.I. = 184+17.84	
183+74.91 (red)		0°00'	Δ = 23° 24'	
L2 183+77.83	C.C. 14° Lt	2°16½'	S.T. = 130.01	0^{85} Rt
+47.83		1°07½'	M.C. Arc = 77.14	0^{92} Rt
3+17.83		0°22½'		0^{48} Rt
182+84.91 (red)				
L2 182+87.83	B.C.T-2 7/8	0°00'		0^{06} Lt
41.4 / +60 77			14 × 60 = 840, 4.2 ; 42.17 × 4.2 = 44.34, 88.68, 93.114	
L2 182+63.69	E.C.	1°03'		0^{52} Lt
+33.69		0°36'		1^{45} Lt
182+00.77 (red)				
L2 182+03.69	C.C.T-2 3/4	0°00'	1.23', 3 30, 40	1^{38} Lt
		3°30½'		

See Pages - 13 & 14

- To Page 13 -

SHAFTER'S - CAMP BERKELEY.
Realignment.

Old ℄ 2' Lt Throughout Tangent.

185 + 42.05		
L_2 ~~185 + 44.97~~	E.C.	1.98 Lt
5 + 14.97		1.82 Lt
+ 84.97		1.37 Lt
L_2 ~~184 + 54.97~~	C.C. T - 2 7/8	0.75 Lt
184 + 52.05		

L_2 Line

Station	Point	Deflection	Offset
199+03.11 (written above) / L_2 ~~197+06.03~~ =	C.C. 6° Lt	8°52¼'	0.83 Lt
9		8°36'	
+50		6°21'	0.60 Lt
8		4°06'	0.79 Lt
+50		1°51'	0.11 Lt
		0°00'	
197+05.99 41 01 (written above) / L_2 ~~197+08.91~~	C.C. 9° Lt	1°48'	¢
+93.91		1°24'	¢
+63.91		0°45'	0.06 Lt
+33.91		0°18'	0.05 Lt
196+00.99 (written above) / L_2 ~~196+03.91~~ =	B.C. T-2¾	0°00'	0.05 Lt
C 195+99.4 POT			

— from Page 14 —

T-2¾ Δ = 4°48'
Arc = 105.00
Ch =

9° Curve
Δ = 17°44½'
Arc = 197½

Back Defl. = 3°00'
D = 637.85
t = 51.64

S.T. West = 266.64
" East = 306.87
(P.O.S.T. On West End = 145.57 E. of B.C.)
(P.O.S.T. On East End = 117.44 N. of E.C.)

L_2 ~~203+14.00~~ 203+11.08	C.C. 14° Rt {	2°16½'		0.19 Lt
+84.00		1°07½'		0.62 Lt
+54.00		0°22½'		0.22 Lt
L_2 ~~202+24.00~~ 202+21.08	B.C. T-2 7/8	0°00'		0.22 Lt
L_2 202				
L_2 ~~201+62.14~~ 201+59.22	E.C.	1°39'		0.63 Lt
+32.14		1°14¼'		0.95 Lt
1+02.14		0°40½'		1.36 Lt
L_2 ~~200+72.14~~ 200+69.22	C.C. T-2½ {	0°00' 4°59'	6°38	1.97 Lt
+50		4°19 15'		2.28 Lt
L_2 200		2°49 15'		2.33 Lt
+60		1°37 15'		1.75 Lt
L_2 ~~199+06.03~~ 199+03.11	C.C. 6° Lt	0°00'		0.93 Lt

L2 Line.

SHAFTER'S - CAMP BERKELEY

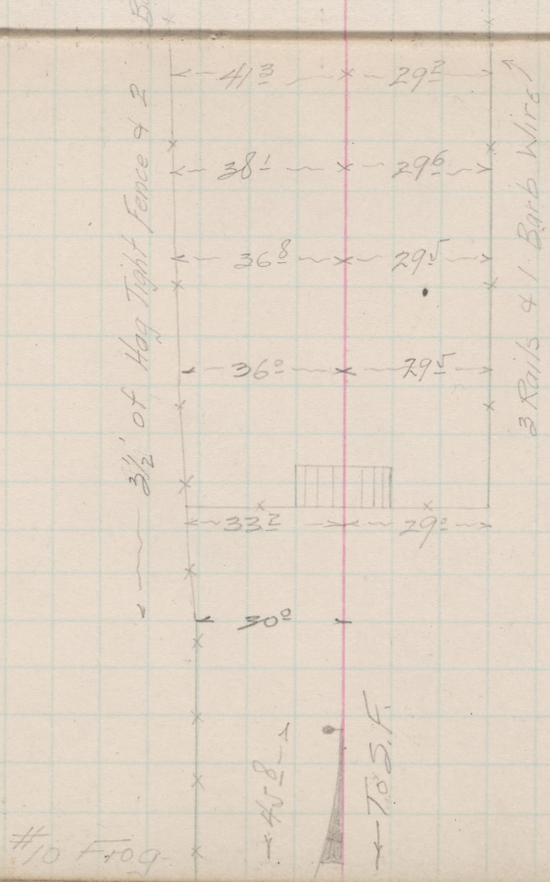
- Realignment -

Reval. 205+44.21 P.O.T. =
Const. 205+33.26 P.O.T. =
L2 ~~205+37.21~~ 205+34.29 E.C. =

See Page. 35

L2 ~~205+37.21~~ 205+34.29	E.C.	4°01½'		0.03 Rt
5+07.21		3°04½'		0.09 Lt
+77.21		1°43½'		0.44 Lt
		0°00'	P.I. = 203+83.81	
L2 ~~204+47.21~~ 204+44.29	C.C.T-2⁷⁄₈	9°19.5'	Δ = 31°15'	0.62 Lt
4		6°01.2'	S.T. = 159.81	
+50		✓ 2°31.2'	P.I. = Same as Revaluation	
		0°00'	4° Curve, Δ = 19°30', Arc = 133.2'	
L2 ~~203+14.00~~ 203+11.08	C.C. 14° Rt	2°16½'		0.79 Lt

+50		
32		
+50		
31		
+46^{7}	W.L. #2 Cat Gd- 23-K-	
30+34^{1}	Angle In Fence-	
29+15^{85}	P.S. East Switch	



- SAN GERONIMO -

Location Of Fence 12-11-15

N.T.R. - Stakes Set For Relocation At 30' From ℄

Station	Fence to stake	Stake to line
36 + 30	30^{1}	
+ 87	31^{1}	
+ 50	41^{3}	
35	57^{5}	30^{3}
+ 50	71^{2}	30^{4}
34	56^{3}	29^{7}
+ 50	53^{9}	30^{0}
33	46^{8}	29^{1}
+ 50	41^{3}	29^{2}

Post In Fair Condition

Barb Wires - In Good Condition -

+50		℄
5		0^{38} Lt
+50		0^{15} Rt
4		0^{05} Rt
+50		0^{28} Rt
C-173+16.89	C.C. 18°30' Rt	0^{87} Rt
3		0^{64} Rt
+50		0^{40} Rt
C-172+20.02	C.C. 2° Rt	0^{37} Rt
2		0^{25} Rt
+50		0^{26} Lt
1		0^{21} Lt
+50		0^{20} Lt
170		0^{10} Rt
C-169+78.35	B.C. 12° Rt = ~~℄ 169+81.27 B.C. 12° Rt~~	0^{14} Rt

12° Curve
Δ = 29°00'
Arc = 241.67
R = 477.64

2° Curve
Δ = 1°56' ±
Arc = 96.87
R = 2864.79

18°30' Curve
Δ = 66°10' ±
Arc = 357.68
R = 310.?

P.I. (Calculated) C-175+23.98

Δ = 100°54'

℄ 545.78 G.A.R.

℄ 496.42 G.A.

S.T. West = 575.63

East = 496.28

(See Page #26 For Diagram)

(See Page #22)

"C" Line

C-180+69^38	B.C. 6°45' Rt	
C-180+23^83	P.O.T. = L2 180+26^75 B.C. T-Z...	
+50		0^05 Lt
80		0^10 Lt
+50		0^15 Lt
9		0^14 Lt
+50		0^13 Lt
8		0^12 Lt
C-177+50^40	E.C. = ~~L2 177+53^37 E.C.~~	0^09 Rt
7		0^03 Lt
C-176+74^57	E.C. 5° Rt	℄
+50		0^05 Rt
6		0^06 Lt

SHAFTER'S - CAMP BERKELEY
Existing Alignment To Establish ℄ R. of W.
12-20-15

5° Curve
Δ = 30°47½'
Arc = 758^23
T = 1146^01

+50			
5			
C-184+90.40	E.C.		0.31 Lt
+50			0.47 Lt
4		14° Curve Δ = 24°26' Arc = 174.52 S.T. = 88.66 P.I. = C-184+04.54	℄
+50			0.06 Lt
C-183+15.88	B.C. 14° Lt		
3			
C-182+41.97	E.C.		0.03 Rt
2		6°45' Curve Δ = 11°39' Arc = 172.59 S.T. = 86.60 P.I. = C-181+55.98	0.01 Lt
+50			℄
1			0.17 Rt
C-180+69.38	B.C. 6°45' Rt		0.12 Rt

C-180+23.83 P.O.T. = L2 180+26.75 B.C. T-2 3/4

"C" Line

992

C-192+49^{29}	B.C. 6°30' Lt	0^{55} Lt
2		0^{18} Lt
+50		0^{02} Lt
1		
+50		
C-190		
+50		
9		
+50		
8		
+50		
7		
+50		
6		

SHAFTER'S - CAMP BERKELEY
Existing Alignment to Establish ℄ of R. of W.
12-20-15

+50		4°39'	S.T. West = 218^{31}	0^{38} Lt
7		2°24'	S.T. East = 298^{35}	0^{65} Lt
			$198+64^{97}$ = Calculated P.I.	
C-$196+46^{66}$	B.C. 9° Lt	0°00'	$197+45^{51}$ = P.O.S.T. West End	0^{49} Lt
6				
Const. $195+99^{94}$	P.O.T. = L_2	$196+03^{21}$ B.C. T-2 3/4		0^{05} Lt
+50				
5				
Const-$194+85^{58}$	P.O.T. = L_2	$194+89^{55}$ E.C.		
C-$194+42^{37}$	E.C.			
4				0^{20} Lt
+50				℄
3				0^{25} Lt
C-$192+49^{29}$	B.C. 6°30' Lt			0^{55} Lt

9° Curve
Δ = 25°00'
Arc = 278
R = 636

6°30' Curve
Δ = 12°33' Arc = 193^{08}
S.T. = 96^{94}
R = 881^{57}

P.I. = C.
(= 9^{92} East of L_2 P.I. $193+40^{45}$)

+50		6°01 9'	0^{15} Lt
3		2°43 2'	℄
C-202+58 95	B.C. 13°15' Rt	0°00'	0^{26} Rt
+50			0^{18} Rt
2			℄
C-201+48 05	E.C.	5°00½'	0^{33} Lt
201		3°55 6'	0^{48} Lt
+50		2°48'	
200		1°40 6	0^{50} Lt
+50		0°33'	0^{33} Lt
		0°00'	0^{04} Lt
C-199+25 46	C.C. 4°30' Lt	12°32¾'	0^{06} Rt
9		11°54'	℄
+50		9°09'	0^{09} Lt
8		6°54'	0^{10} Lt

13°15' Rt
Δ = 31°09'
T = 120 59
Arc = 235 09
R = 432 66

4°30' Curve Lt
Δ = 10°01'
Arc = 222 59
R = 1273 32

SHAFTER'S - CAMP BERKELEY.
Existing Alignment To Establish ℄ of R. of W.
Jan. 1916.

S.T. West = 21831

Reval.	205 + 44 ^{71}	P.O.T.	=	
L_2	205 + 37 ^{21}	E.C.	=	
Const.	205 + 33 ^{26}	P.O.T.	=	

{ Reval. 205+44 ^{71} P.O.T.
" L_2 " 205+34 ^{29} E.C.
"C" 205+33 ^{26} P.O.T } Eq.

0 ^{03} Rt

C-204+94 ^{04} E.C.	15°34 ^{5}'		0 ^{15} Rt
+50	12°39 ^{4}'		0 ^{03} Lt
C-204	9°20 ^{65}'		0 ^{05} Lt

"C" Line.

SHAFTER'S - CAMP BERKELEY -

Existing Alignment To Establish ℄ of R. of W.

Jan 1916

[illegible]

[illegible]

[illegible]

[illegible]

1ST. CURVE - WEST

— DEFLECTIONS

P.SW. TAYLORVILLE 325+76.0

STAKE SET.	327+00		
STAKE SET.	326+00		
E.C.	325+65.57		INST. AT. E.C.
	325+50		1°19.'56
	325+00	LENGTH 192.97 Δ= 32°53'	5°34.96'
	324+50		9°50.'26
	324+00	17°02'30"	14°05.7
P.C.C.	323+72.6		16°25.'66
	323+47.6	17°20'	
	322+97.6	LENGTH 192.21 Δ=33°19'	
P.O.C.	322+47.6		INST. AT. π
Δ=11°39	322+00	17°20'	4°07.'52
P.CC.	321+80.39		5°49.44
	321+50	133.31 LENGTH Δ=6°07 4°35'30"	INST. AT. 0°42'
	321+00		1°52.'0
		320+47.18	
P.C.C.		320+50	

PRESENT PROFILE ALIGN— 6°24'

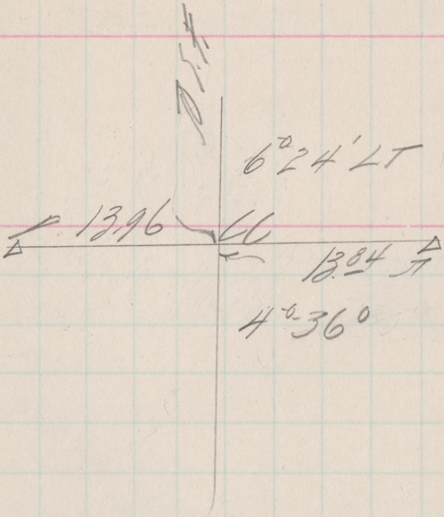
MARCH-10-1916

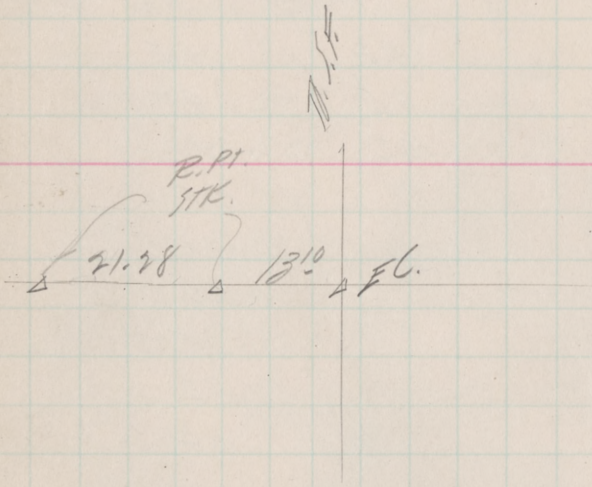
OF TAYLORVILLE

NEW ℄ AS STAKED TO RIGHT / LEFT PRESENT ℄	DISTANCE from new ℄ TO EDGE BANK ON RIGHT	DISTANCE from new ℄ TO HILL ON LEFT
0.72 RT.		
1.18	33	7.5 4' high bank
1.85	16	8.5
324+96.5 CULVERT EXTEND ON MOVE-OVER ON RT. NOW 7.0 from new ℄ 14' LONG.		
2.42	6.0	9.8
3.05	9.0	10.5
3.22	9.5	9.2
3.05	10.0	9.0
3.26	8.	9.5
3.0 RT	13.5	10.0
2.00		9.9
1.15 RT.		9.5
0.39		8.9
0.15		8.3
0.00		7.0

—OVER—

— TAYLORVILLE —



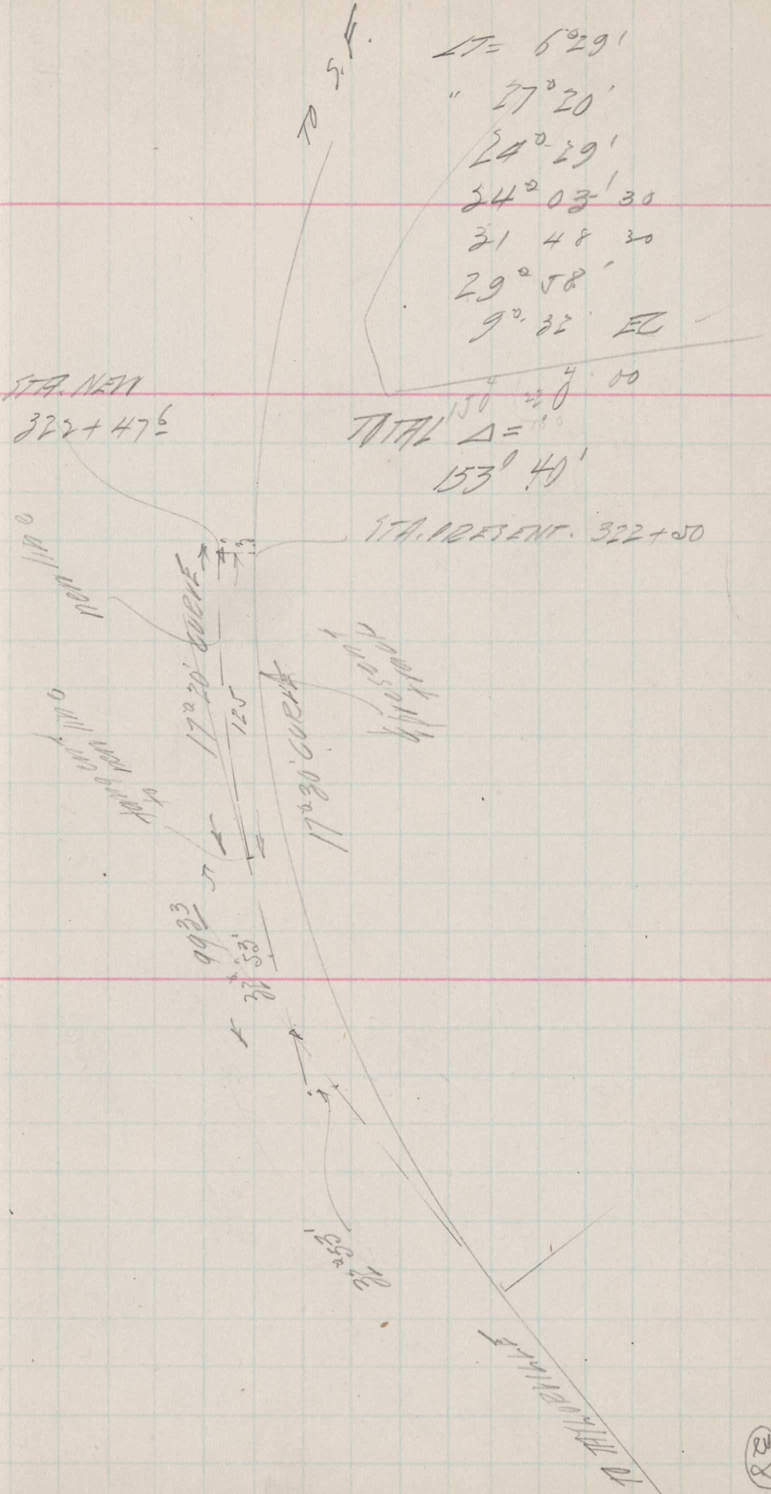


∠I = 6°29'
" 27°20'
24°29'
24°03'30
31 48 30
29°58'
9°32' EC

TOTAL Δ =
153°40'

STA. NEW
322+47.6

STA. PRESENT. 322+50



2nd & 3RD. CURVE WEST

STATIONING OBTAINED FROM 1ST. TRESTLE WEST JENNINGS WEST BLK. HD.

NEW LINE AS STAKED

NEW ¢ RT. OR LEFT OF PRESENT TRK.

365+00 STAKE SET ON TANG.

E.C. 364+13.27 =
364+12.53 = EQUATION. 00 88 | 0.0
63+50 +38 35 | 0.68 LT.
63+00 388 35 Δ = 4°49' | 1.82
62+50 38 35 T.T. = 120.49 | 2.31
LENGTH 240.83
362+00 88 35 | 2.2 LT.
361+71.17 60 06 B.C. 2° LT. | 2.32
39 44
361+51.09 E.C. | 2.37
61+00 88 35 | 3.0
360+15 85
CULVERT √ 29 J. - 360+27.5
60+50 38 35 Δ = 13°17' | 3.0
break hill on
60+00 88 35 T.T = 111.2 | 1.85
59+50 38 35 LENGTH - 221.38 | 0.13 LT.
18 06
359+29.71 B.C. 6° LT. | 0.0

PT. SET IN TANGENT.
359+00
358+50

OF JEWELL

Plotted 3/20/16 Fee

NEW ℄ TO HILL ON LEFT.	NEW ℄ TO TOP- OR EDGE- FILL ON RIGHT.		PROFILE ALIGN- MENT-
9.0	9.0	THRU CUT. BEGIN.	
9.0	11.0	E.C.	363+17.0
8.5	9.0		Δ= 4°20'
7.7	9.0		
8.0	8.3	B.C.	362+30.3
9.0	8.0		
7.0	8.2		
9.0	8.5	E.C.	361+27.1

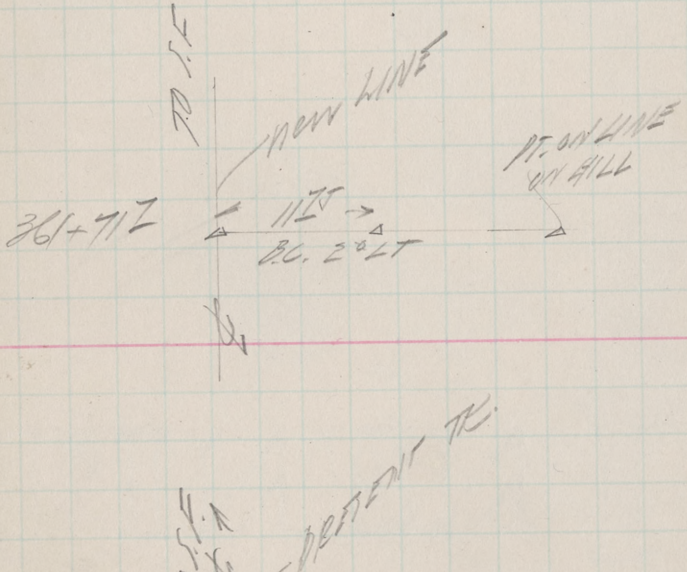
left edge 7.5 from ℄ NEW LINE - EXTEND ON LEFT.

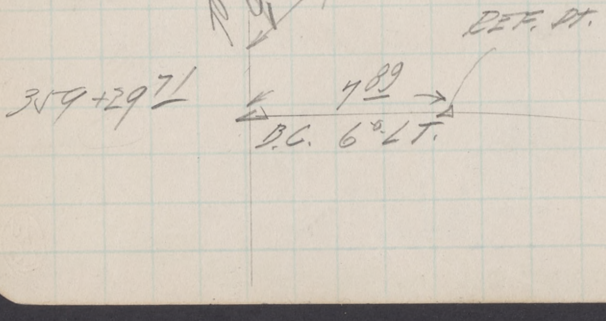
7.1	7.0		Δ=13°48'
8.8	6.0		8° LT.
9.6	7.0	B.C.	359+54.6
9.6	6.5		

→ Note: For Alignment as Corrected to Conform with Revaluation Alignment see p. 40 --- Fee.

(EW)

2nd & 3RD. CURVE WEST OF SEWELL





ALIGNMENT OF PAGE 39
Corrected to Conform with
Revaluation Alignment.
3/20/16
Fee.

364+02^{79} P.O.T.

E.C. 364+01^{45} =

T.C. 4°50'
S.T. 120^{90}

361+59^{78} B.C. 2° Lt.

361+39^{73} E.C.

T.C. 13°18'
S.T. 111^{35}

359+18^{06} B.C. 6° Lt.

2nd CURVE

EAST OF GARCIA

—NEW ALIGNMENT—

Note:- For Alignment Corrected to Conform with Revaluation Alignment see p. 42 --- Foc

80.01.12

555 + 90.89 E.C.

55 + 60.89 73.01 angle in taper = 8°55'30"

55 + 30.89 43.01 Length " = 96°

5 5A + 94.89 07.01 CC TA.

54 + 44.89 57.01

53 + 94.89 07.01

53 + 44.89 57.01 TOTAL Δ = 80°51'

53 + 04.35 16.47 S.T. = 313.10

52 + 54.35 66.47 Length main curve 340.54

52 + 04.35 16.47 angle in main curve = 63°00'

51 + 54.35 66.47 CC 18°30' LT

51 + 18.35 30.47 BACK DEFLECTION } = 5°44'00

50 + 88.35 00.47 DEFLECTION FORWARD } = 3°11'30"

550 + 58.35 60.47 B.C. TA

MARCH-11-1916

Plotted 3/20/16 #Fil. X-972

NEW ℄ TO RIGHT OR LEFT OF PRESENT TRACK	DISTANCE from new ℄ TO HILL ON LEFT.	PROFILE ALIGNMENT.
0.00	9.5	
0.03	9.5	
0.63	8.5	P.C. 555 + 43.9
1.14	7.9	
1.60	8.0	
1.39	7.7	
1.69	7.5	18° 30' LT.
1.9	7.6	T.C. =
1.85	7.0	80° 28'
1.68 LT.	7.0	
1.18 LT.		
0.59 LT.		
0.08 LT.		P.T. 551 + 09.5
0.0		

NER

CULVERT 33 C
stationing from
new line = 551+45

CULVERT 33 D
= 555+56.5

note: company pole to be moved in location of new line
STA.

Alignment of p. 41 Corrected to Conform with Revaluation Alignment - - - Fee. 3/20/16.

555 + 92 ^{93} P.O.T.

555 + 90 ^{94} E.C. =

Lat. = 95 ^{75} "D" = 311.63

Dep. = 5 ^{34} "t" = 47.68

554 + 94 ^{94} C.C. T 4

T.C = 80° 28′ } TOTAL

S.T. = 311 ^{34}

551 + 56 ^{47} C.C. 18° 30′ Lt.

T.C. of Taper = 8° 55 1/2′

Length " = 96°

550 + 60 ^{47} B.C. T 4

TRESTLE - 25 H.

ESTABLISH

STA.		Low	Top Tie
PRESENT TREST. EAST BLK HD.	$44+38^{5}$	4.78	✓ 5.02 =100.0
PRES. TREST. WEST BLK. HD.	$143+33^{5}$		
G.G. = 143+32.1A		4.30	✓ 4.51
143+00		4.22	4.42
142+50		3.89	4.05
142+00		3.72	3.92
141+50		3.42	3.59

98.65
3.59
H.I. 102.24
4.05
98.19

99.8
3.59
— 103.39
4.42
98.97

3.59

102.24
4.51
97.73

GRADES —

44+40
11.5
44+38.5

102.24
5.02
97.22

H.I.

—3.27 B.M.

98.9

103.39
4.51
98.88

4.67

103.39
5.02
98.37

4.10
4.20

cap 11½
sill 11½
string 16¾
tie 5¾
plate ¼

3.99

3.61

9".

3.45

3.18

11½
11½
16¾
5¾
48½
36
3' 9½"
3.792

GRADE ↑ -0.52

B.M. ON POST = ELEV.

STA.	+ ROD	⊼	- ROD
TOP TIE E. END PRES. TREST.			
TOP TIE W. END PRES. TR.			
#8 144 + 41.5			
14.5 T.P.			
#7 144 + 27.0			
15			
#6 144 + 12.0			
13.65			
#5 143 + 98.35			
15			
#4 143 + 83.35			
13.74			
#3 143 + 69.61		3.81	3.71
15			
#2 143 + 54.61		3.75	3.59
#1 143 + 40.11		3.67	3.51

ELEV.	GRADE ELEV. TOP TIE	GRADE ELEV. CUT OFF	HT. POST: OR CUT OFF OR TOP POST TO BOT. SILL			IS BENT ON CURVE OR TANGENT	ANGLE BENT MAKES WITH TAN. TO CURVE
94.19	100.0	97.167	2.98	2.97	2' 11 3/4"	TANG	⊥ TO TANG TO CR
81.225	100.075	97.242	16.017	16-0 3/16"		"	"
81.145	100.153	97.320	16.175	16' 2 3/32		CURVE	"
81.495	100.224	97.391	15.896	15' 10 3/4"			71°30'
81.855	100.302	97.469	15.614	15' 7 3/8" ∇			72°.32'.6
81.885	100.374	97.541	15.656	15' 7 7/8"			
88.105	100.452	97.620	9.515	9' 6 3/16"			
92.290	100.527	97.694	5'.404	5' 4 7/8"			

[illegible]

[illegible]

1-3 + 80 [illegible]

1-3 - 67 [illegible]

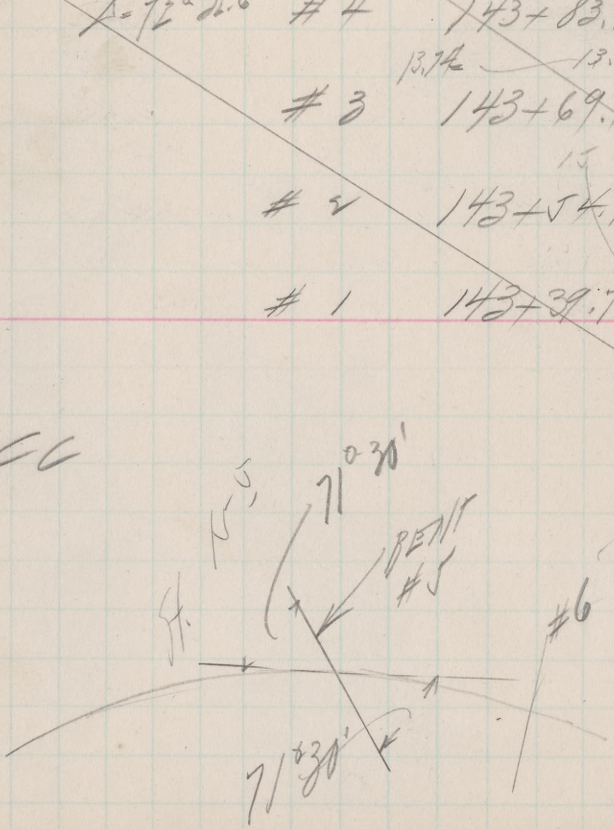
1-3 - 59 [illegible]

1-3 - 57 [illegible]

1-3 - 32 [illegible]

B.C.		TRESTLE	144+43.71
NEW EAST BLK HD - }			144+42.0
℄ BENT		# 8	144+41.5
℄ BENT		# 7	144+27.0 (14.5)
E.C.	13.14		(15)
℄		# 6	144+12.0 (13.65)
℄	Δ=71°30' WITH TANG -	# 5	143+98.35 (15)
℄	Δ=12°32.6	# 4	143+83.35 (13.74 — 13.62)
℄		# 3	143+69.73 (15)
℄		# 2	143+54.73
℄		# 1	143+39.73

CC



25H — NARROW GAGE — APRIL-1916

SUPERCEDED BY NEXT PAGE

DEFLEC. ON TANG. | DEFLEC. ON TANG.

0° — 144 + 25.14

0° 09.8' ✓

0° 11¼' — 144 + 10.14

0° 24' ✓

△ BACK - 0° 33.87

0° 28⅛' — 143 + 95.14

0° 47' ✓

BACK = 1° 13.55

0° 52½' — 143 + 80.14

1° 14' ✓

BACK - 2° 03.2

1° 24⅜' — 143 + 65.14

1° 50' 30"

BACK-DEF = 3° 12.5

2° 03¾' — 143 + 50.14

2° 35' 30"

BACK - 4° 35.7

2° 50⅝' — 143 + 35.14

3° 00⅝' 143 + 32.14

TBE ST

B.C. T_3		144+43.71
NEW EAST BLK HD.		144+42.0
℄ BENT	#8	144+41.5
		14.5
℄ BENT	#7	144+27.0
E.C.		
℄ BENT	#6	144+12.0 ✓
		13.65 ✓
℄ BENT	#5	143+98.35
		15 ✓
℄ BENT	#4	143+83.35
		13.74
℄ BENT	#3	143+69.61
		15
℄ BENT	#2	143+54.61
		14.5
℄ BENT	#1	143+40.11
		.5
new N. BLK. HD.		143+39.61
C.C.		

143+40.11
32.16
7.97

SUPER. ELEV.
main curve = $2\frac{1}{2}$" = 0.2083
÷ 93
super. raise
per lin ft = .00213

STLE 25 H.

144 + 25.14
144 + 12
13.

43.71
25.14
8.57

DEFLEC.

on tang.

" "

0° 09.8	13.14 0°		144 + 25.14
	0° 11 1/4'	2°30	144 + 10.14
0° 24' ✓			BACK DEF. = 0° 33' .87
	0° 28 1/8	5°	143 + 95.14
0° 47' ✓		7°30	BACK DEFL. = 1° 13'.55
	0° 52 1/2		143 + 80.14
1° 14' 30" ✓		10°	BACK = 2° 03'.88
	1° 24 3/8'		143 + 65.14
1° 51' 00"		12°30	BACK = 3° 13'.27
	2° 03 3/4'		143 + 50.14
2° 34' 30"		15°	BACK = 4° 33'.27
	2° 50 5/8'		143 + 35.14
		17°30	
	3° 00 5/8'		143 + 32.14

7.97

144 + 25.14
12
13.14
1.86
15.00

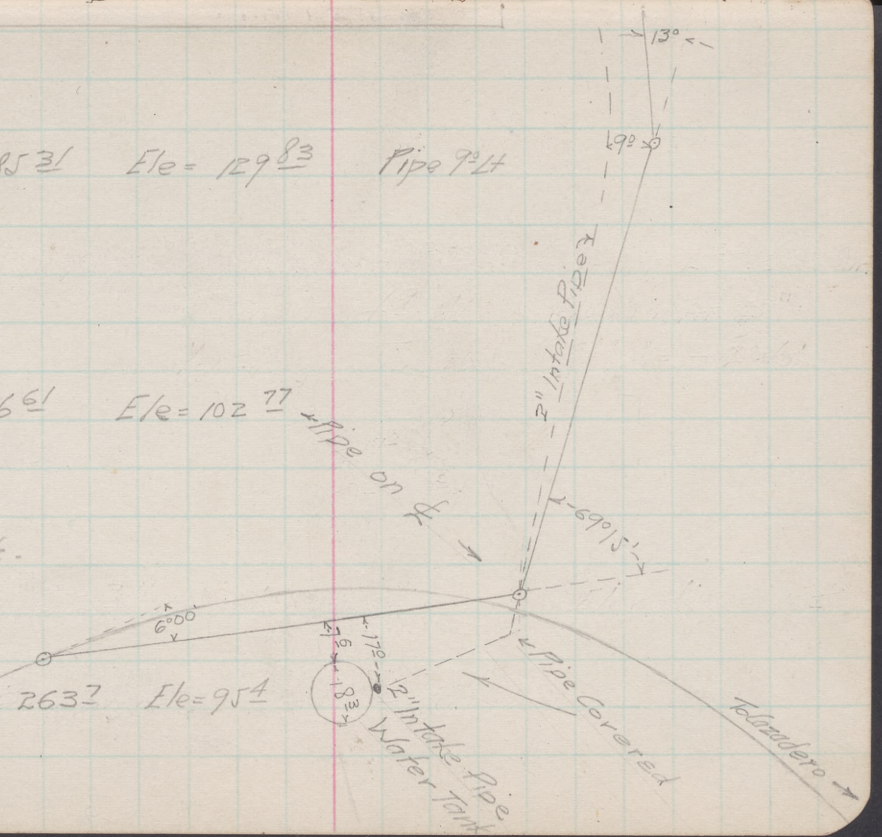
STA	+	⊼	−
B.M.	3.91	103.91	
TR. = 100.0			
BENT #8			
T.P.			10.25
	+1.21	94.87	
			-10.735
	+3.93	88.065	
BENT #7			
" #6			
" #5			
" #4			
" #3			
T.P.			-1.39
	+11.47	98.145	
BENT #2			
" #1			
Shot on top tie west end PREST. TREST.	+2.38		

TRESTLE 25H-

ROD	ELEV.	B.M.-
9.72	94.19	#8
	93.66	
	84.135	
6.84	81.225	#7
6.92	81.145	#6
6.57	81.495	#5
6.21	81.855	#4
6.18	81.885	#3
	86.675	
10.04	88.105	#2
5.855	92.290	#1
	100.525✓	Check

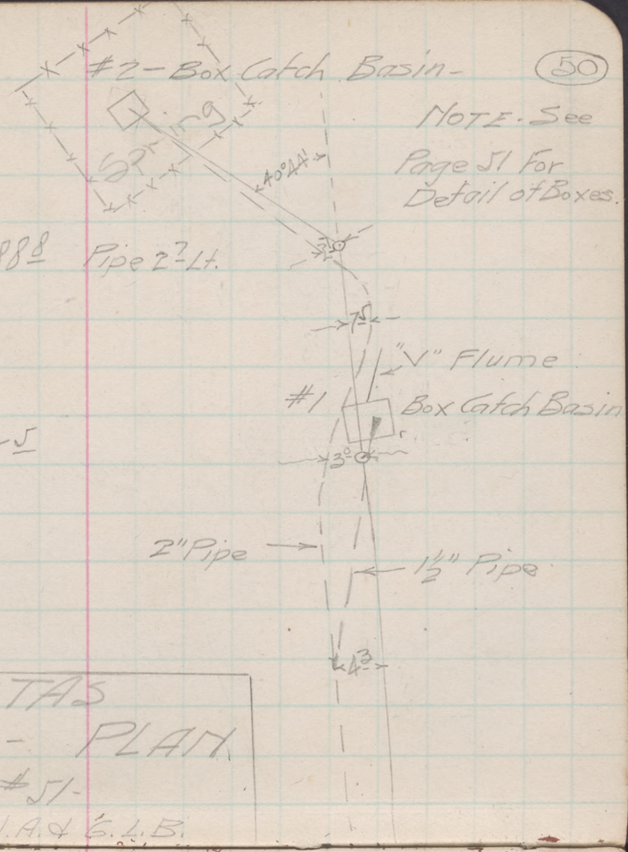
W.T.R. 11-26-15 W.J.A. & C.L.B.

3+50$^{\underline{31}}$	Δ Pt	13°00' Lt	85$^{\underline{31}}$	Ele = 129$^{\underline{83}}$	Pipe 9° Lt
2+63$^{\underline{7}}$	Δ Pt	69°15' Lt	86$^{\underline{61}}$	Ele = 102$^{\underline{77}}$	
1+88$^{\underline{5}}$	2" Intake Pipe-				
1+80$^{\underline{8}}$	℄ 18$^{\underline{3}}$' Steel Water Tank-				
	Backsight on L, 146+06$^{\underline{32}}$				
0+00 = L,	148+10$^{\underline{28}}$	6°00' Rt	263$^{\underline{7}}$	Ele = 95$^{\underline{4}}$	



P.I. L, 146+06$^{\underline{32}}$

$5+47^{54}$	End of Line	Top of Box	Ele 202^{55}		
$5+22^{13}$	ΔPt	40°44' Lt	25^{41}	Ele = 188^{8}	Pipe 2^{7} Lt.
+17	Crosses Pipe				
5+00	Pipe Is 7^{5} Ft Rt				
+49	Crosses Pipe				
$4+35^{62}$	P.O.T.		86^{51}	Ele = 165^{5}	
$4+16^{2}$	Opp. Junct. of Pipes-				



NOTE - See Page 51 For Detail of Boxes.

LAGUNITAS
WATER SUPPLY - PLAN.
For Details See Page #51-
W.T.R. 11-26-15 W.J.A. & G.L.B.

- LAGUNITAS -
WATER SUPPLY - DETAILS

See General Plan Page 50

W.T.R. 11-26-15

W.J.A. & G.L.B.

Elev. Floor of Depot = 105.3

" Top of Rail Opposite W.L. of Depot = 104.7

" Base Present Water Tank = 106.45

" Top of Catch Basin #1 = 165.5

" " " " " #2 = 202.55

Datum - Assumed = B.M. On Rwd. Stump 11' Rt of E.S. L-149+25

Ass. Elev = 95.90

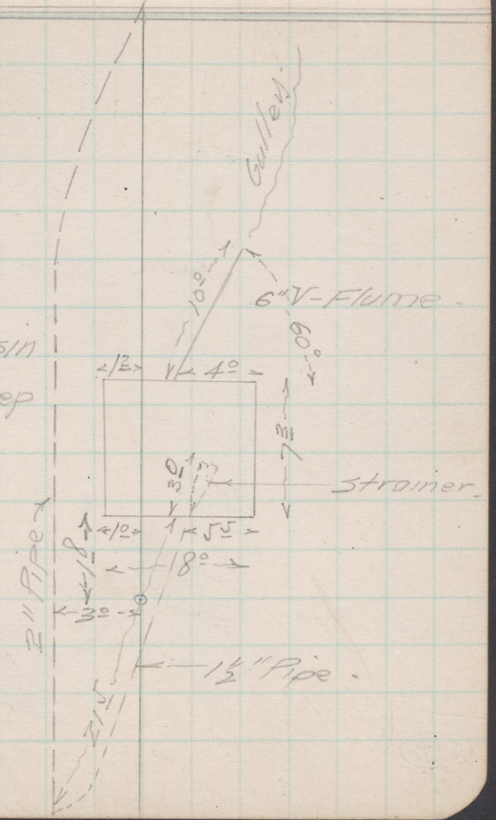
#1 Catch Basin

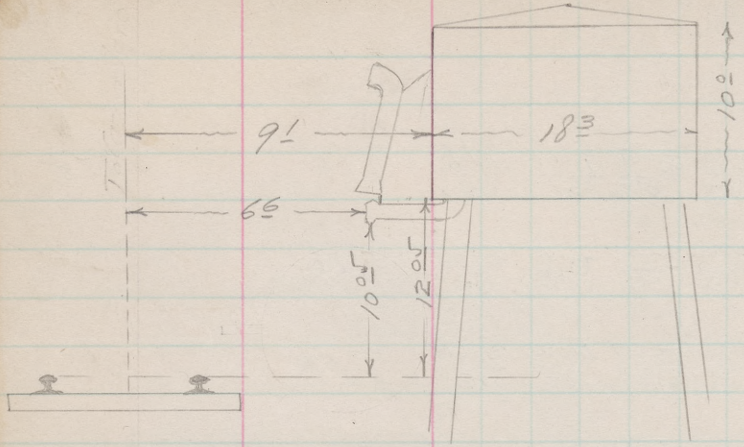
Box 2' Deep

4+35.62 P.O.T.

Pipe Enters Box 1.5 Below Top

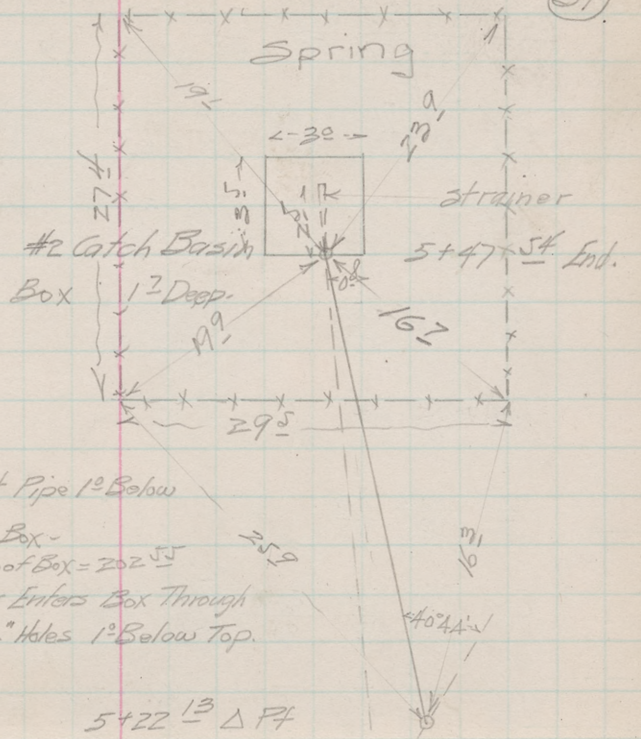
Elev. of Top = 165.5





Lagunitas Water Tank = Steel-
Capacity = 19460 Gallons -

Elevation Base Steel Tank = 106.45



Outlet Pipe 1.0 Below
Top of Box -
Ele. Top of Box = 202.55
Water Enters Box Through
2 - 1½" Holes 1.0 Below Top.

Station	Elev.	Left		Right
+75	99^{6}	$\frac{50}{99^{38}}$ $\frac{30}{99^{6}}$ $\frac{20}{99^{71}}$ $\frac{10}{99^{82}}$ $\frac{Rail}{99^{82}}$	℄	$\frac{102}{99^{0}}$ $\frac{82}{99^{1}}$ $\frac{70}{99^{2}}$ $\frac{50}{99^{3}}$ $\frac{30}{99^{8}}$ $\frac{15}{99^{5}}$ $\frac{0}{99^{6}}$
+50	99^{7}	$\frac{36}{99^{56}}$ $\frac{23}{99^{73}}$ $\frac{10}{99^{91}}$ $\frac{Rail}{99^{95}}$	℄	$\frac{78}{99^{8}}$ $\frac{67}{100^{0}}$ $\frac{60}{99^{8}}$ $\frac{33}{99^{3}}$ $\frac{20}{99^{4}}$ $\frac{2}{99^{9}}$ $\frac{0}{99^{7}}$
+25	99^{8}	$\frac{30}{99^{63}}$ $\frac{20}{99^{81}}$ $\frac{10}{100^{0}}$ $\frac{Rail}{100^{20}}$	℄	$\frac{68}{100^{3}}$ $\frac{50}{99^{9}}$ $\frac{30}{99^{5}}$ $\frac{0}{99^{8}}$
1+00 = W.L. Depot	99^{8}	$\frac{30}{99^{7}}$ $\frac{20}{99^{91}}$ $\frac{10}{100^{12}}$ $\frac{Rail}{100^{12}}$	℄	$\frac{66}{100^{4}}$ $\frac{52}{100^{3}}$ $\frac{30}{99^{8}}$ $\frac{24}{99^{6}}$ $\frac{2}{100^{1}}$ $\frac{0}{99^{8}}$
+75	99^{85}	$\frac{30}{99^{76}}$ $\frac{20}{99^{99}}$ $\frac{10}{100^{22}}$ $\frac{Rail}{100^{22}}$	℄	$\frac{68}{100^{5}}$ $\frac{54}{100^{3}}$ $\frac{34}{100^{0}}$ $\frac{24}{99^{7}}$ $\frac{2}{100^{0}}$ $\frac{0}{99^{85}}$
+50	99^{9}	$\frac{30}{99^{83}}$ $\frac{20}{99^{04}}$ $\frac{10}{100^{25}}$ $\frac{Rail}{100^{25}}$	℄	$\frac{76}{98^{4}}$ $\frac{64}{99^{7}}$ $\frac{47}{99^{8}}$ $\frac{37}{99^{9}}$ $\frac{8}{100^{0}}$ $\frac{0}{99^{9}}$
+25	99^{9}	$\frac{30}{99^{9}}$ $\frac{20}{100^{1}}$ $\frac{10}{100^{30}}$ $\frac{Rail}{100^{30}}$	℄	$\frac{67}{99^{6}}$ $\frac{48}{99^{6}}$ $\frac{23}{99^{6}}$ $\frac{12}{99^{8}}$ $\frac{6}{99^{8}}$ $\frac{0}{99^{9}}$
0+00	S.Z. 99^{9}			$\frac{68}{99^{5}}$ $\frac{53}{99^{3}}$ $\frac{43}{99^{5}}$ $\frac{33}{99^{3}}$ $\frac{16}{99^{9}}$ $\frac{7}{100^{0}}$ $\frac{0}{99^{9}}$

100^{00} Assumed Elev. Top of Rail West Line of Depot – Low Rail

- POINT REYES -

- GRAVELLING IN FRONT OF DEPOT -

STAKES SET 11-30-15

W.T.R. of { W.J.A. / G.L.B.

Station	Elevation	- Grades -				Surface X-Section ℄						
3+00	99.0	← GRADES FOR GRAVELLING →				53/98.5	40/98.6	38/98.5	20/98.4	11/98.7	4/98.7	0/99.0
+75	99.0					45/99.3	40/99.5	31/98.9	16/98.7	4/99.2	0/99.0	
+50	99.2					48/100.1	20/98.9	4/99.2	0/99.2			
+25	99.5	25/99.6	8/100.0	2/99.8	℄	52/100.5	40/99.7	20/99.6	10/99.5	2/99.6	0/99.5	
2+00	99.55	37/99.55	22/99.83	8/100.05	2/99.85 ℄	56/99.8	26/99.6	3/99.7	0/99.55			

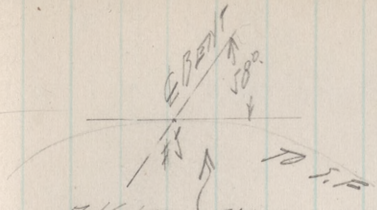
TRESTLE ~~2?~~ 25

STA.		DEFLECT.
E.C.C.	= 157 + 70 4/	0° 0'
PTS. ON TAPER	157 + 55 4/	0° 11 1/4'
	157 + 40 4/	0° 28 1/8'
	157 + 25 4/	0° 52 1/2'
	157 + 10 4/	1° 24 3/8'
	157 + 09 2/	1° 27'
	156 + 98 0/	1° 56'
P.C. of TAPER	156 + 95 4/	2° 03.3/4'
	156 + 83 0/	2° 42'
CC	156 + 77 4/ ——— CC	3° 00 5/8'
		21° 59.5'
	156 + 68 0/	21° 08.8'
	156 + 53 0/	19° 47 8/
	156 + 38 0/	18° 26 8'
	156 + 23 0/	17° 05 8'
	156 + 08 0/	15° 44 8'
	155 + 95.27	14° 36'
P.O.C.	155 + 80 0/ ———	13° 13 1/2'

for backsight on CC

154 + 33 05/ CC. ———

2° 30'
5° 00'
7° 30'
10° 00'
15
12° 30"
11.2
15
156 + 80 0/
17° 30' curve
15
15
15
15
12.73



ANGLE SKEW BENTS MAKE WITH TANGET OF CURVE -

BENT #9 BACK DEF. = 2°27' ⊥ to tang-

BENT #8 BACK DEF. = 3°22' 50°30'

BENT #7 BACK DEF. = 4°47' 52° 41.5

BENT #6 55° 18'

BENT #5 58° ✓

BENT #4 60° 42'

BENT #3 63° 24'

BENT #2 66° 06'

BENT #1 ⊥ to tangent

.0055
15
275
55
.0825

157+10.0

12.5
.0055
625
625
.06875

STA.

#9	~~157+09.2~~	157+10.0		100.00
#8	11.2 ~~156+98.0~~	14.5 156+95.5		100.07
#7	15 ~~156+83.0~~	15.0 156+80.5		100.158
#6	15 ~~156+68.0~~	15.0 156+65.5	156+68.0	100.226 100.241
#5	113.93 15 ~~156+53.0~~	12.5 156+53.0 ✓		.083 100.309
#4	15 ~~156+38.0~~	156+38		100.392
#3	15 ~~156+23.0~~	156+23		100.474 .072
#2	15 ~~156+08.0~~	156+10.0		100.546 .079
#1	12.73 ~~155+95~~.27	14.5 155+95.5		100.625

	Grade Elev. Top of Tie	Grade Elev. Top (Cut Off) to Center Post	Actual Elev. Bottom of Sill	Distance of Bottom Sill to Top Center Post	Length Center Post (Subtract Ht. of Sill)	Rate of Super-Elev. per Ft.	Super-Elevation	Angle
00	100.0						.137	⊥ to tang.
7	100.061						.162	50° 30'
58	100.144						.195	52° 41½
226 41	100.227						.208	55° 18'
683 309	100.309	✓					.208	58°
392	100.392	✓					.208	60° 42'
474	100.474	✓					.208	63° 24'
46	100.556						.208	66° 06'
5	100.626						.208	⊥ to tang. to curve

(9-4)

E.C.	157+70.4		0°00'
	157+55.4		0°11 1/4'
	157+40.4		0°28 1/8'
	157+25.4		0°52 1/2'
	157+10.4		LEFT 1°24 3/8'
#9	157+10.0		1°25'
#8	156+95.5		2°03 3/4
#7	156+80.5	95±	2°50 5/8'
		156+77±	
#6	156+65.5	X	20°55.2 ✓
#5 ✓	156+53.0	X	19°47.8' ✓
#4 ✓	156+38.0	X	18°26.8' ✓
#3 ✓	156+23.0	X	17°05.8' ✓
#2 ✓	156+10.0	X	15°55.5' ✓
#1 ✓	155+95.5	X	14°37.2 ✓
P.O.C. 155+80.			13°13 1/2' ✓

19° 47.8
13 17
6 34

17° 05 8
13 13
3° 52

18° 26 8
13 13
5° 13

15 55
13 13
2° 42

20° 55'
13 13
7° 42

BACK — ANGLE

2° 20 5/8' — TANGENT

3° 33 3/4 — TANGENT

5° 01 7/8 — TANGENT

1° 42' — TANGENT ←

6° 34' — 58° ✓

W — 60° 42' ✓

63° 24' ✓

TANGENT TO CURVE

"

1° 24

STA.	+	⊼	-	Rod	El.
B.M.	1.4	101.40			
BENT. 9				8.62	
BENT #1				9.65	
T.P			-9.65		91.75
	+0.92	92.67			
BENT #2				10.29	
" #3				11.28	
" #4				11.69	
" #5				11.56	
# 6				12.00	
# 7				10.95	
# 8				4.50	
# 9					

100.0
1.64

H.I. 101.64
-9.83
91.81
.205
92.015 H.I.
10.46

81.755

92.015
1.13
80.86

100.226
80.630
19.596
3.792
15.804

ELEV.

100.08

TOP TIE - EAST END

DEPT. TREST.

Length cap for post.

100.20

92.78 ✓
91.75 ✓

100.625	91.75	#1	DIF. 8.875 ✓	-3.792 =	5.083	#1
100.546	82.380 ✓	#2	18.166		14.374	#2
100.474	81.390 ✓	#3	19.084 ✓		15.292	#3
100.392	80.980 ✓	#4	19.412		15.620	#4
100.309	81.11 ✓	#5	19.199		15.407	#5
100.241	80.67 ✓	#6	19.571		15.779	#6
100.158	81.72 ✓	#7	18.438		14.646	#7
100.070	88.17 ✓	#8	11.900		8.108	#8
100.00	92.78	#9	7.220		3.428	#9

92.015
10.88
81.13

81.11 #5
10.88
91.98 ✓
Hal.-91.98
10.26
81.72 #7

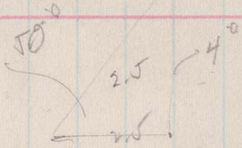
91.98
11.35
80.63

G-6

4) 2.50 (.625
24
10
8
200
.625 8
4
2.5 92

4.7
.05
.235

156 + 65 5



cot = 2.5/4

2.5
2.5
12.5

.762
4
3.048

15
2.77
17.23

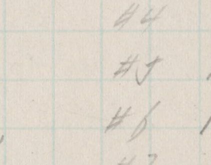
2.77
2.5
.27

total
Super. Elev. Gage Rate ∅1 ft.

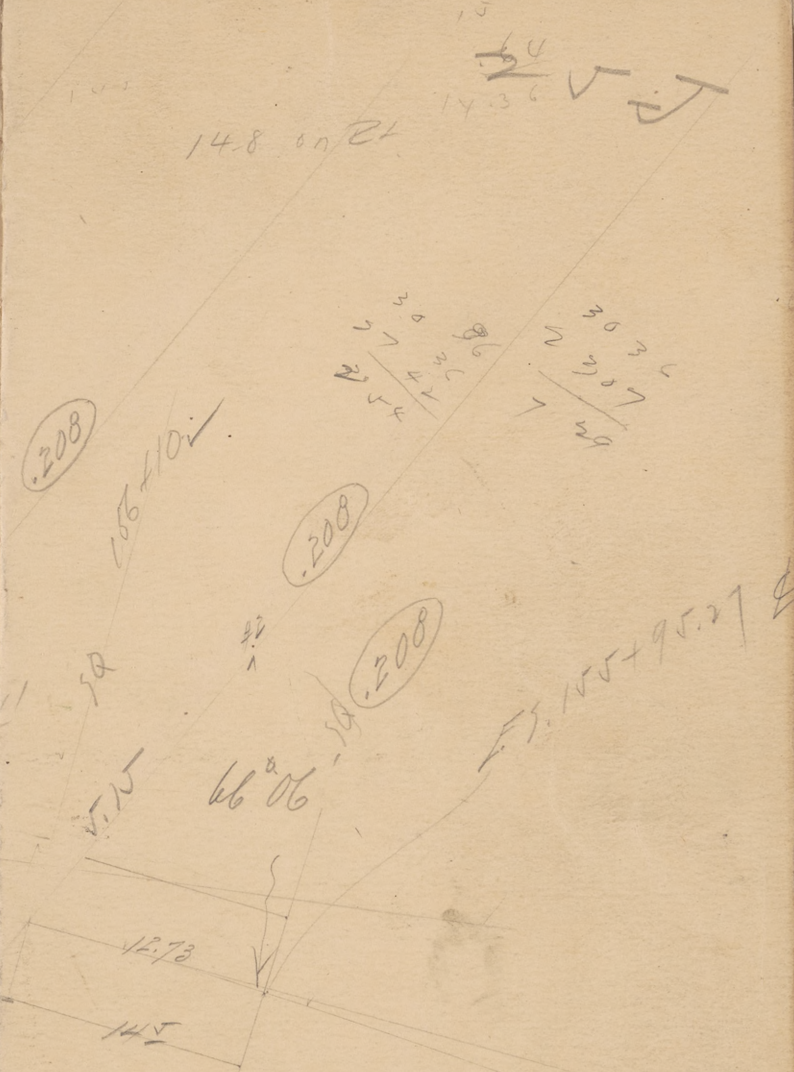
.208	$2\frac{1}{2}$"	$\frac{17}{32}$"	#1	5'	1"
.208	$2\frac{1}{2}$"	$\frac{17}{32}$"	#2	14'	$4\frac{1}{2}$"
.208	$2\frac{1}{2}$"	$\frac{1}{2}$" to ft	#3	15'	$3\frac{1}{2}$"
.208	$2\frac{1}{2}$"	"	#4	15'	$7\frac{1}{2}$"
.208	$2\frac{1}{2}$"	"	#5	15'	$4\frac{7}{8}$"
.208	$2\frac{1}{2}$"	$\frac{17}{32}$"	#6	15'	$9\frac{3}{8}$"
.208	$2\frac{1}{2}$"	$\frac{17}{32}$"	#7	14'	$7\frac{3}{4}$"
.167	2"	$\frac{13}{32}$"	#8	8'	$1\frac{1}{4}$"
.134	$1\frac{5}{8}$"	$\frac{11}{32}$"	#9	3'	$5\frac{1}{8}$"

49
.95
4.5
1.88
7.00
6.76
14.60
4

15' $9\frac{5}{8}$"



$\frac{4}{x}$


14.8 on Pt
.208
156+10
.208
.208
5.15
66°06'
12.73
145
E.S. 155+95.27
per ft.

4) 2.500 (.625
24
10
8
20

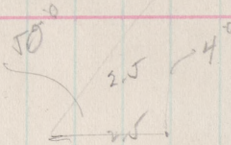
.625
8
...

2.5
2.5
12.5

cot = 2.5/4

4.7
.05
.235

156 + 65.5



.762
4
3.048

.5
2.77
17.23

2.77
2.5
.27

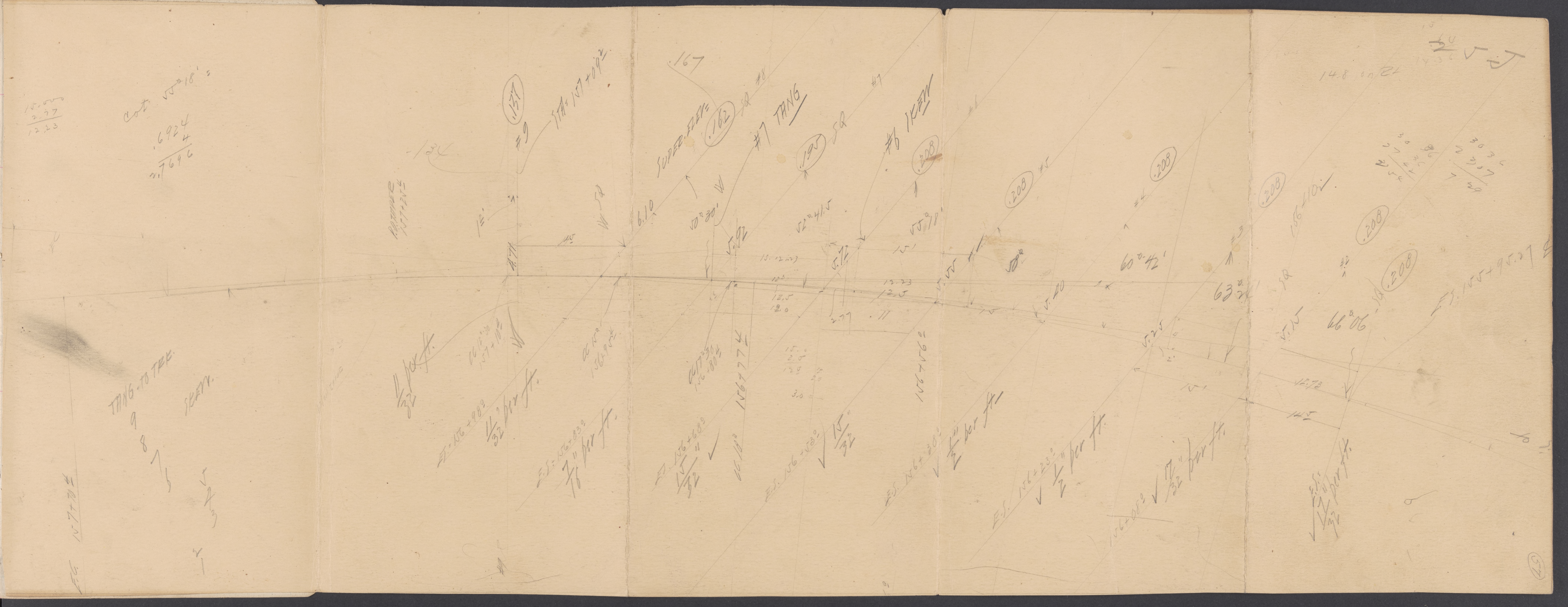
total
Super. Elev. Gage Rate p ft.

.208	2½"	17/32"	#1	5'	1"
.208	2½"	17/32"	#2	14'	4½"
.208	2½"	½" to ft	#3	15'	3½"
.208	2½"	"	#4	15'	7½"
.208	2½"	"	#5	15'	4⅞"
.208	2½"	17/32"	#6	15'	9⅜"
.208	2½"	17/32"	#7	14'	7¾"
.167	2"	13/32"	#8	8'	1¼"
.134	1⅝"	11/32"	#9	3'	5⅛"

49

15' 9⅝"

Div Δ ÷ 4/x


Cot. 55°18' =
.6924
2.7696
SUPER-ELEV.
.162
#7 TANG
.195
#6 SKEW
.208
#9
.137
TANG. TO TRK.
SKEW
50°30'
55°18'
60°42'
66°06'
1/32" per ft.
7/16" per ft.
15/32
1/2" per ft.
17/32" per ft.
F.S. 155+95.27
148 on 24

101.4041
0.77
100.63

.0417
4.71
417
2919
188

.0417 / 4.71 = .1 / 5.55

.0417
5.55
2085
2085
.223335
1884
3493
3297
1960

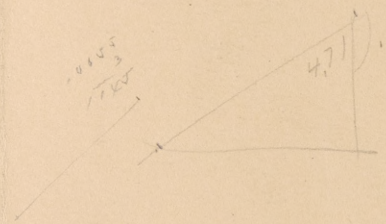
(.0473

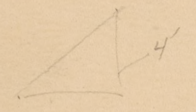
.0417
4.71
417
2919
1668
.195 4107

1.208
.010
.222

5.72 / 2 = 4.71 / .222

4.71)





.808) 4.0000
3392
6080
5436

156 + 77.4

LAST

157 + 70[4]
157 + 55[4]
157 + 40[4]
157 + 25[4]
157 + 10[4]

157 + 10[4]
157 + 95[4]
157 + 80[4]

#9	157 + 89.73	157 + 10[4]	
#8	156 + 95[23]	157 + 95[4]	
#7	156 + 80[23]	157 + 80[4]	
		157 + 77[4]	
#6	156 + 68[0]		21° 08.8'
#5	156 + 53[0]		19° 47.8'
#4	156 + 38[0]		
#3	156 + 23[0]		
#2	156 + 10[0]		
#1	155 + 95[5]		

15
5.4
60
75
81.0
1° 21

156 + 68°
155.5 + 95.5
72.5
5.4
290 0
362 5
36
(60) 391.50
360

6° 31.5
13 13.5
19° 45.0

68°

156 + 68
155 + 80
88
54
352
440
4752
420
(60) 552. 21 08
7° 55'
13 13

68
68.8
21
13 13.5
7° 55.3

7° 42'

55° 18'

58°

60° 42'

63° 24'

TANGENT TO CURVE

TANGENT TO CURVE

LAST

157 + 10 4
15

157 + 95 4
15

157 + 80 4

157 + 70 4
15
157 + 55 4
15 4
157 + 40 4
15
157 + 25 4
15
157 + 10 4

#9 157 + 09.73 157 + 10 4
14 5
#8 156 + 95 23 157 + 95 4
15 80.5
#7 156 + 80 23 157 + 80 4
12 23 157 + 77 4
#6 156 + 68.0 21° 08.8'
1 4
15 1° 21.
#5 156 + 53 0 19° 47.8'
15
#4 156 + 38 0
15
#3 156 + 23 0
13
#2 156 + 10 0
14
#1 155 + 95 5

8
9
6

15
5.4
60
75
81.0
1.21

.005
.5
.00375

156 + 68°
155 + 95.5
72.5
5.4
2900
362.5
60) 391.50
360

68°

156 + 68
155 + 80
88
5.4
35.2
440
475.2
60) 420
55.2

(7°55'
13 13
21.08

(6°31.5
13 13.5
19°45.0

68
68.18
21
13 13.5
7° 55.3

7°-42'

55°18'

58°

60°42'

63°24'

TANGENT TO CURVE

TANGENT TO CURVE

SANTA ROSA-

BET. J & 6th STS-

STA.	+	H.I.	-	Rod
B.M.	2.60	162.885		
0				
0+50				
1+00				
1+50				
2+00				
2+32.6 ✓				

.4 / 232.6 = 7 / 1

.00171

232.6) .400000
232.6
16740
16282
4580

2326
.0017
16282
2326
.39542

GRADE G.D.

ELEV. ELEV. R.D.

160.280
157.46

5.36

157.86

5.025

4.82
157.46
162.28
157.55
4.73

158.72
157.55
1.17

5.58
1.17
4.41

LAGUINATAS

APRIL 12-1916

℄ Station 99+ ← 26 — 1+85.0 37+88 (37+59.6) Lin…

185.0

CRIBBING

EAST P.S.A. LAGUINATAS ← 1+04. 38+69

ABUT'M'T 0+00 ← 26 — END CRIBBING

39+73 (39+44.6) Line change 12…

2 5 J

Line change 12/20/16 WEIIID 4-7

E ^ 5-36

TOPTIE

ange 12/20/16

84.135
+3.505

87.640 #1
6.15

81.49 #5

87.64
5.77 rod

81.87 #4

97.47
81.87

15.60

39
12
15' 7" 7"

32

11 16/32

1
14' 7 23"/32

88-065 #1
− 1-39
86-675
+ 11-47
98.145
#1 − 98.145
10.04
88.105 #2

98.145
2.38
100.52 ✓

97.62
88.105
9.515

98.145 #1
5.855
92.290 #1

97.694
92.290
5.404 #1

62

88.065
-6.57
81.495 elev.

97.39
81.495
15.895 #5

88.065
6.21
81.855 elev #4
97.47
4.38

97.47
81.855
15.615 #4

97.17
94.19
2.98

100.00
2.83
.17

103.91
19.72
94.19

103.91
3.39
100.52

94.87
− 10.735
84.135
+3.93
88.065

A1 — 88.065
− 6.84
81.225 #8

88.065
6.92
81.145 ✓

97.242 8
2833
.4075

97.242
81.225
16.017 #7

97.320
81.145
16.175 ✓ #6

88.065
6.18 #
81.885

3 97.54
81.885
15.655 #3 ✓

156 + 77.4
156 + 53.0

24.4 of 18° curve Δ = 4° 23.5'
3' of 17° 30' " Δ = 0° 31.5'
15' of 15° " Δ = 2° 15.0'
2.6 of 12° 30' Δ = 0° 19.5

45.0 — 6° 89.5

Total Δ. 7° 29.5'

18 × 60 = 10.80

24.4 − 10.8 = 19.52

60) 263.52 — 240 — 23

17 × 60 = 1020, + 30 = 1050, 10.5 × 3 = 31.5

15 × 9 = 135; 60) 135 (2° — 120 — 15

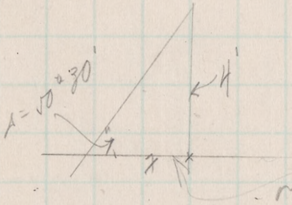
15 × 60 = 900

12 × 60 = 720, + 30 = 750; × 2.6 = 19.500

58° − 7° 30' = Δ = 50° 30'

.824 × 4 = 3.296

Cot Δ = 3/4



14.5 − 3.3 = 11.2 center on bent east end

Bent # 8

Computation east Blk. Ld.
Bent truss 2 & 5

Bent #7

18° curve Δ = 4° 23.5'
δ = 0° 23.5'
Δ = 0° 31.5'
4° 18.5'
Δ = 5° 18.5'

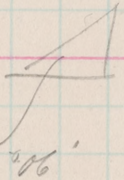
24' 7
26' 7' 15°
3' 17° 30'
30°

58°
5° 18.5'
52° 41.5'

1.5
2.12
12.88

2'6
9'
0° 23.4'

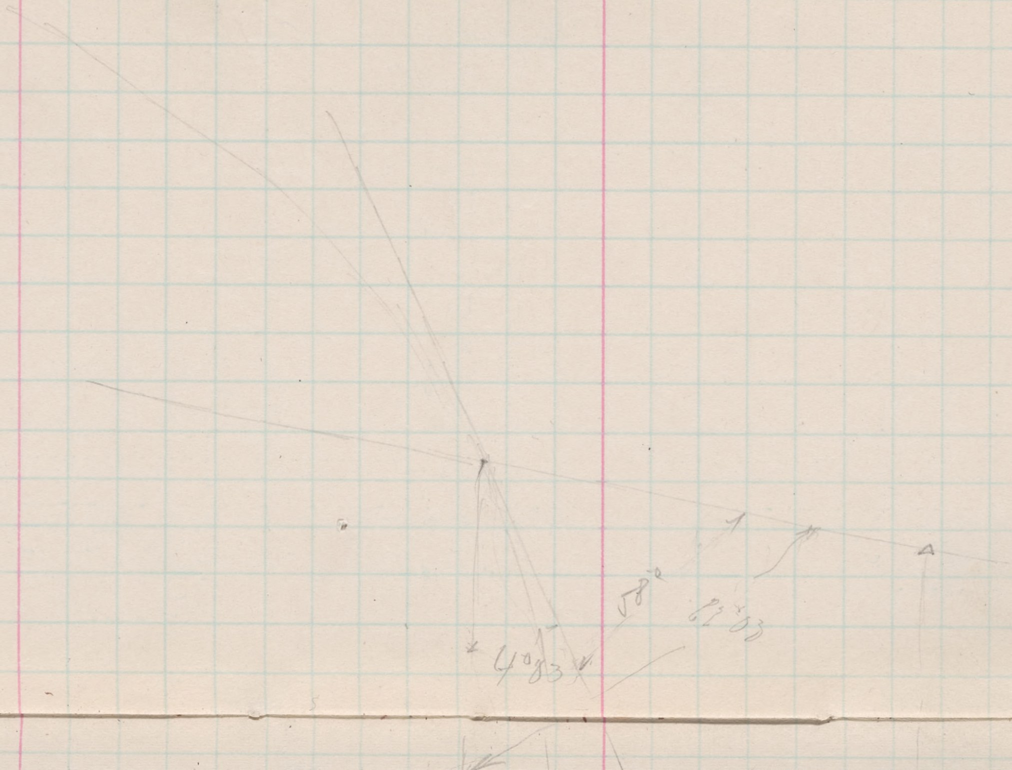
14.50
1.77
12.73



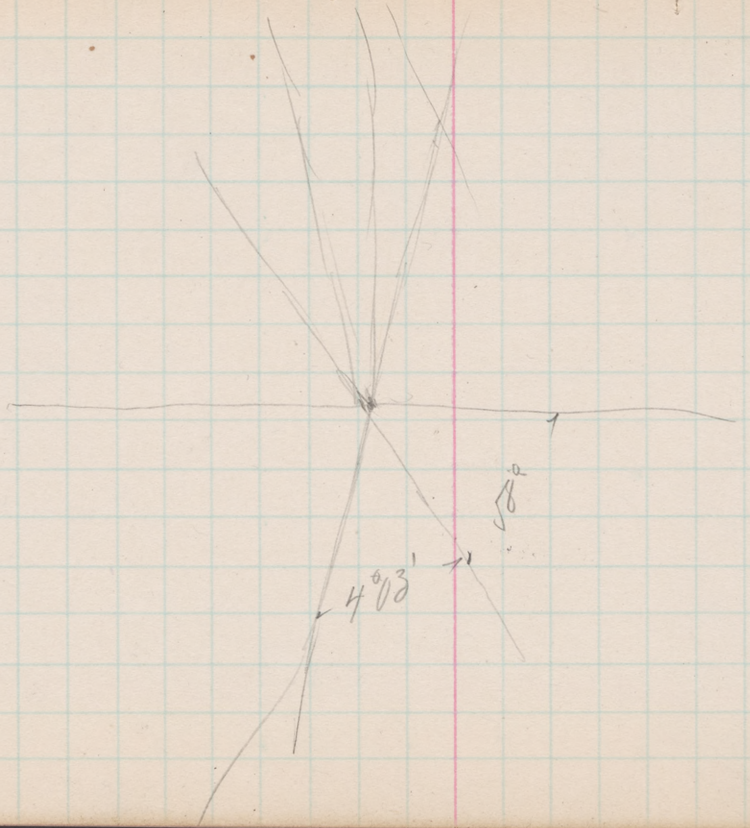
66° 06'

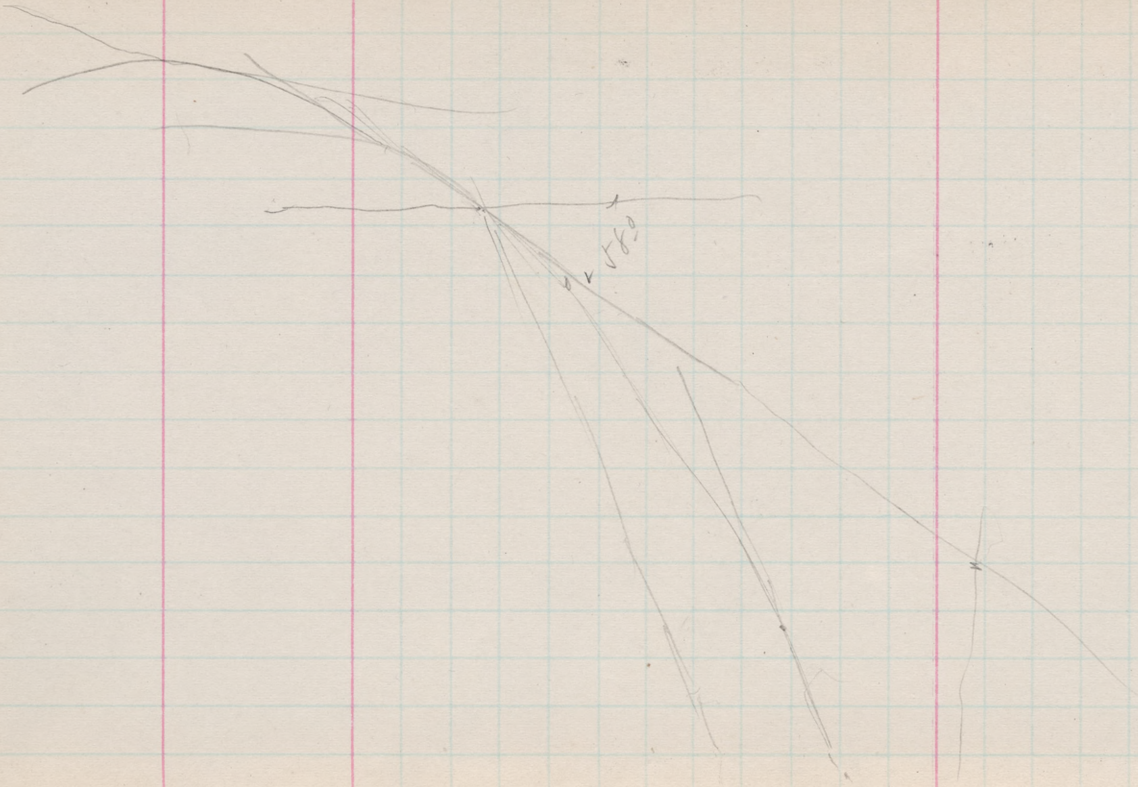
443
4
1.772

cot 66° 06' = 1/4



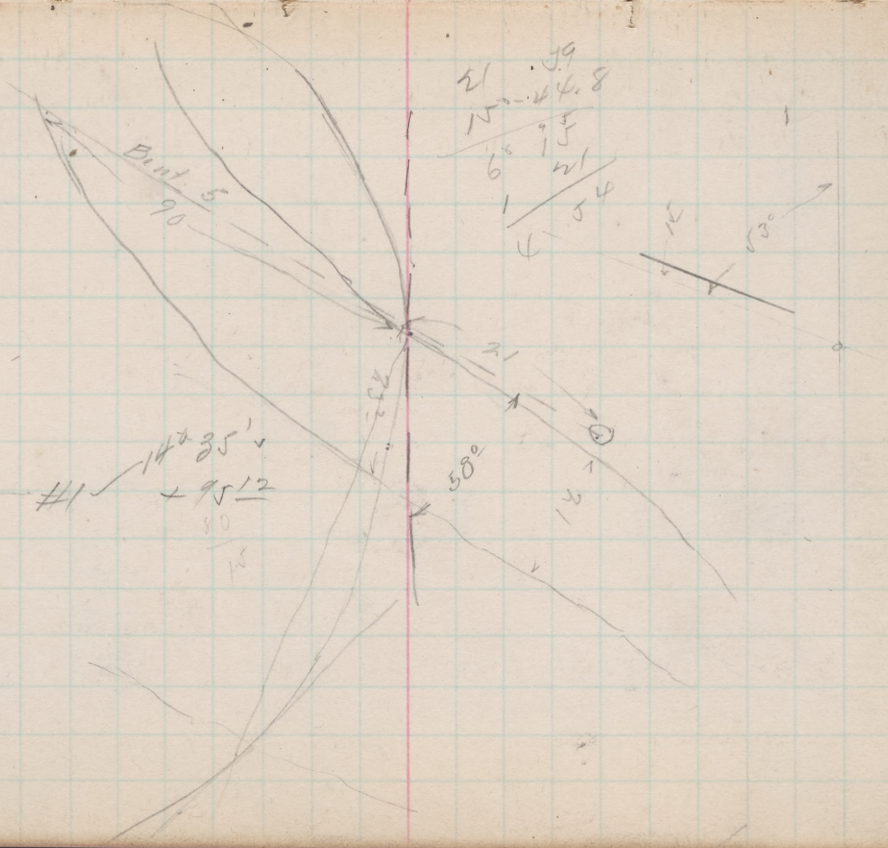
46.67


1
58°
1'
4°03'


or 58°

154 +25 4/10	△ B.C.P.O. Taper.		14½
+13°	Bent	9	
+98		8	
+83		7	
156+77	△ C.C.		21°59½ √
+68°		6	21°08.8
+53°		5	19°47.8 √
+38°		4	18°26.8
+23°		3	17°05.8
+08°		2	15°44.8 √
+93°	Bent	1	14°23.8 √
155 + 80	△ P.O.C		13°13½' √

154 + 35.60 – 00 (33.05)



155 + 80
154 + 33.05
1 47
5.4
4 88
5
7 3 3.8
7 9
6.0
9 3
1.8 0
.3

15
5.4
5 0
6
7 5
8 3.0
1.28

156 + 77.4
155 + 80
97.4
5.4
96
3 8 9
4 8 7 0
5 5.9 6
5 4 8 0
46

18
9
5.4
8° 46'

5.4
9.

5 = 19° 47.8
15° 44.8
4° 03

157 + 70 4/ S.C.
157 + 55 4/
157 + 40 4/
157 + 25 4/

0°
0° 11 1/4'
0° 28'
0° 52 1/2'

1?? + 25 4/ △ P.C. P.O. Taper.

Track to the Creek 1º at 35:0

360

135
150
67 50
135
3 | 202.50
9 | 67 50
7 50 On Yokohama
West of Shafters -

4°35
4°41 ½
9°16 ½

6.5.0
6.0

33°05
7°25'
25°40 :20
51°30' :20

40
60
3
1.8
1°48'

10
3
.30